NEW ISSUE - BOOK ENTRY ONLY **RATINGS: See "RATINGS" herein**

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the 2021A Bonds is excluded from gross income for federal income tax purposes except interest on any 2021A Bond for any period during which it is held by a "substantial user" of the facilities financed or a "related person" of such substantial user, as those terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended (the "Code"), and is an item of tax preference for purposes of the federal alternative minimum tax, (ii) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the 2021B Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax, and (iii) interest on the 2021 Bonds, and any profits made on their sale, is exempt from taxation by the Commonwealth of Pennsylvania and all political subdivisions thereof. Interest on the 2021 Bonds may be subject to certain federal taxes imposed only on certain corporations. For a more complete discussion of the tax aspects, see "TAX MATTERS" herein.

ALLEGHENY COUNTY AIRPORT AUTHORITY

ALLEGHENY COUNTY AIRPORT AUTHORITY
(Pittsburgh International Airport)
$719,850,000 Airport Revenue Bonds, Series 2021A (AMT)
$112,820,000 Airport Revenue Bonds, Series 2021B (Non-AMT)

Dated: Date of Delivery **Due:** January 1, as shown on the reverse side hereof

Interest on the Allegheny County Airport Authority (Pittsburgh International Airport) Airport Revenue Bonds, Series 2021A (AMT) (the "2021A Bonds") and the Allegheny County Airport Authority (Pittsburgh International Airport) Airport Revenue Bonds, Series 2021B (Non-AMT) (the "2021B Bonds" and, together with the 2021A Bonds, the "2021 Bonds") will be paid on each January 1 and July 1 commencing January 1, 2022. The 2021 Bonds will be issued as fully registered bonds and initially will be registered in the name of Cede & Co., as nominee for The Depository Trust Company, New York, New York ("DTC"). DTC will act as a securities depository for the 2021 Bonds. Purchases of beneficial interests in the 2021 Bonds will be made in book-entry only form (without certificates) in the denominations of $5,000 or any multiple thereof within the applicable maturity. So long as Cede & Co. is the registered owner of the 2021 Bonds, principal of, premium, if any, and interest on the 2021 Bonds will be payable by The Bank of New York Mellon Trust Company, N.A., as Trustee (the "Trustee"), to DTC, which will in turn remit such payments to its participants for subsequent disbursement to beneficial owners of the 2021 Bonds, as more fully described herein.

The 2021 Bonds are subject to optional and mandatory sinking fund redemption prior to maturity, as described herein. See "DESCRIPTION OF THE 2021 BONDS - Redemption Provisions."

The 2021 Bonds will be issued pursuant to a Master Trust Indenture dated as of December 1, 2019 (as amended from time to time and as previously supplemented, the "Master Indenture") as supplemented and amended by a Second Supplemental Indenture dated as of August 1, 2021 (the "Second Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), each between the Allegheny County Airport Authority (the "Authority") and the Trustee. As more fully described herein, the proceeds of the 2021 Bonds, together with other funds available therefor, will be used to (1) pay the costs of certain capital improvements undertaken by the Authority at Pittsburgh International Airport (the "Airport") as part of its Terminal Modernization Program (the "TMP"), the Airside Terminal Renovations and the Airline Fit-Outs (each as defined hereinafter), including repayment of all or a portion of the outstanding principal balance under the PNC Line of Credit (as defined hereinafter) as of the date of issuance and delivery of the 2021 Bonds, which was used to pay certain costs of the TMP, (2) fund capitalized interest on the 2021 Bonds, (3) fund the Common Debt Service Reserve Account (as defined hereinafter) within the Debt Service Reserve Fund (as defined hereinafter), and (4) pay the costs of issuance of the 2021 Bonds. See, "THE PLAN OF FINANCE" herein.

The 2021 Bonds will be secured under the Master Indenture on a parity basis with additional senior bonds issued in the future under the Master Indenture as described herein. See "SECURITY FOR THE 2021 BONDS" herein.

The Second Supplemental Indenture provides for certain amendments to the Master Indenture which will become effective upon the consent of not less than 51% in the aggregate of Bondholders. By acceptance of a confirmation of purchase of the 2021 Bonds, each Bondholder will be deemed to have consented to the amendments to the Master Indenture described herein, and as such the amendments will become effective. See "AMENDMENTS TO THE MASTER INDENTURE" herein.

The scheduled payment of principal of and interest on the 2021A Bonds maturing January 1, 2046 and the 2021B Bonds maturing January 1 of the years 2039, 2040, 2041 and 2046 (together, the "Insured 2021 Bonds") when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured 2021 Bonds by ASSURED GUARANTY MUNICIPAL CORP.

ASSURED GUARANTY® MUNICIPAL

THE 2021 BONDS ARE LIMITED OBLIGATIONS OF THE AUTHORITY. THE PRINCIPAL OF, INTEREST ON AND PREMIUM, IF ANY, ON THE 2021 BONDS ARE PAYABLE BY THE AUTHORITY ONLY OUT OF NET REVENUES (AS DEFINED IN THE INDENTURE) AND FROM SUCH OTHER MONEYS AS MAY BE AVAILABLE UNDER THE INDENTURE FOR SUCH PURPOSE. NEITHER THE GENERAL CREDIT OF THE AUTHORITY NOR THE CREDIT OR TAXING POWER OF THE COUNTY OF ALLEGHENY, THE COMMONWEALTH OF PENNSYLVANIA OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED FOR THE PAYMENT OF THE 2021 BONDS. THE 2021 BONDS SHALL NOT BE OR BE DEEMED A GENERAL OBLIGATION OF THE AUTHORITY OR AN OBLIGATION OF THE COUNTY OF ALLEGHENY, THE COMMONWEALTH OF PENNSYLVANIA OR ANY POLITICAL SUBDIVISION THEREOF. THE AUTHORITY HAS NO TAXING POWER. SEE "SECURITY FOR THE 2021 BONDS."

This cover page contains information for quick reference only. It is not a summary of this issue. Investors must read this entire Official Statement, including without limitation the information set forth herein under "CERTAIN INVESTMENT CONSIDERATIONS," to obtain information essential to the making of an informed investment decision.

The 2021 Bonds are offered, subject to prior sale, when, as and if issued by the Authority and accepted by the Underwriters listed below (the "Underwriters") subject to the approving legal opinion of Squire Patton Boggs (US) LLP, Washington, DC, Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the Authority by its counsel, Saul Ewing Arnstein & Lehr LLP, Pittsburgh, Pennsylvania. Certain legal matters will be passed upon for the Underwriters by their counsel, Eckert Seamans Cherin & Mellott, LLC, Pittsburgh, Pennsylvania. It is expected that delivery of the 2021 Bonds will be made in New York, New York through the facilities of DTC on or about August 26, 2021 against payment therefor.

Citigroup **PNC Capital Markets**

BofA Securities **J.P. Morgan**

Siebert Williams Shank & Co., LLC **Piper Sandler & Co.**

The date of this Official Statement is August 11, 2021.

$719,850,000
ALLEGHENY COUNTY AIRPORT AUTHORITY
(Pittsburgh International Airport)
Airport Revenue Bonds, Series 2021A (AMT)

Maturity (January 1)	Principal Amount	Interest Rate	Yield	Price	CUSIP†
2026	$10,865,000	5.000%	0.470%	119.469	01728LEQ1
2027	11,410,000	5.000%	0.670%	122.705	01728LER9
2028	11,980,000	5.000%	0.880%	125.378	01728LES7
2029	12,580,000	5.000%	0.990%	128.347	01728LET5
2030	13,210,000	5.000%	1.130%	130.742	01728LEU2
2031	13,870,000	5.000%	1.260%	132.879	01728LEV0
2032	14,560,000	5.000%	1.350%	131.949*	01728LEW8
2033	15,290,000	5.000%	1.460%	130.823*	01728LEX6
2034	16,055,000	5.000%	1.530%	130.113*	01728LEY4
2035	16,860,000	5.000%	1.600%	129.407*	01728LEZ1
2036	12,000,000	5.000%	1.630%	129.106*	01728LFB3
2036	5,700,000	4.000%	1.770%	119.131*	01728LFM9
2037	18,530,000	4.000%	1.800%	118.847*	01728LFC1
2038	19,270,000	4.000%	1.840%	118.469*	01728LFD9
2039	20,040,000	4.000%	1.880%	118.092*	01728LFE7
2040	20,840,000	4.000%	1.930%	117.624*	01728LFF4
2041	21,675,000	4.000%	1.960%	117.344*	01728LFG2

$122,095,000 4.000% Term Bonds due January 1, 2046**; Yield 2.060%; Price 116.415*; CUSIP† 01728LFH0
$151,540,000 5.000% Term Bonds due January 1, 2051; Yield 2.030%; Price 125.167*; CUSIP† 01728LFJ6
$95,280,000 5.000% Term Bonds due January 1, 2056; Yield 2.080%; Price 124.685*; CUSIP† 01728LFK3
$96,200,000 4.000% Term Bonds due January 1, 2056; Yield 2.230%; Price 114.857*; CUSIP† 01728LFL1

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* Priced to the first optional redemption date of January 1, 2031.

** Insured 2021 Bonds.

$112,820,000
ALLEGHENY COUNTY AIRPORT AUTHORITY
(Pittsburgh International Airport)
Airport Revenue Bonds, Series 2021B (Non-AMT)

Maturity (January 1)	Principal Amount	Interest Rate	Yield	Price	CUSIP†
2026	$1,695,000	5.000%	0.410%	119.756	01728LFN7
2027	1,780,000	5.000%	0.510%	123.654	01728LFP2
2028	1,870,000	5.000%	0.700%	126.649	01728LFQ0
2029	1,960,000	5.000%	0.830%	129.661	01728LFR8
2030	2,060,000	5.000%	0.960%	132.331	01728LFS6
2031	2,160,000	5.000%	1.090%	134.656	01728LFT4
2032	2,270,000	5.000%	1.240%	133.086*	01728LFU1
2033	2,385,000	5.000%	1.310%	132.361*	01728LFV9
2034	2,505,000	5.000%	1.360%	131.846*	01728LFW7
2035	2,630,000	5.000%	1.400%	131.436*	01728LFX5
2036	2,760,000	5.000%	1.430%	131.129*	01728LFY3
2037	2,895,000	4.000%	1.610%	120.661*	01728LFZ0
2038	3,015,000	4.000%	1.650%	120.276*	01728LGA4
2039**	3,135,000	4.000%	1.610%	120.661*	01728LGB2
2040**	3,260,000	4.000%	1.660%	120.180*	01728LGC0
2041**	3,390,000	4.000%	1.690%	119.893*	01728LGD8

$19,095,000 4.000% Term Bonds due January 1, 2046**; Yield 1.840%; Price 118.469*; CUSIP† 01728LGE6
$23,705,000 5.000% Term Bonds due January 1, 2051; Yield 1.810%; Price 127.316*; CUSIP† 01728LGF3
$30,250,000 5.000% Term Bonds due January 1, 2056; Yield 1.860%; Price 126.824*; CUSIP† 01728LGG1

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* Priced to the first optional redemption date of January 1, 2031.

** Insured 2021 Bonds.

THE ALLEGHENY COUNTY AIRPORT AUTHORITY

Authority Management
Christina A. Cassotis, Chief Executive Officer
Eric Sprys, Executive Vice President and Chief Financial Officer
Paul Hoback, Chief Development Officer
Lisa Naylor, Chief Human Capital Officer

Authority Solicitor
Saul Ewing Arnstein & Lehr LLP
Pittsburgh, Pennsylvania

Bond Counsel
Squire Patton Boggs (US) LLP
Washington, DC

Trustee
The Bank of New York Mellon Trust Company, N.A.
Pittsburgh, Pennsylvania

Financial Advisor
PFM Financial Advisors LLC
Philadelphia, Pennsylvania

Airport Consultant
LeighFisher, Inc.
San Francisco, California

The information contained in this Official Statement has been furnished by the Authority, DTC and other sources that are believed to be reliable. No dealer, broker, salesperson or any other person has been authorized by the Authority or the Underwriters to give any information or to make any representations other than those contained in this Official Statement in connection with the offering contained herein, and, if given or made, such information or representations must not be relied upon as having been authorized by the Authority or the Underwriters.

This Official Statement does not constitute an offer to sell or solicitation of an offer to buy, nor shall there be any sale of the 2021 Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information and expressions of opinion herein are subject to change without notice, and neither delivery of this Official Statement nor any sale made thereafter shall under any circumstances create any implication that there has been no change in the affairs of the Authority or in any other information contained herein, since the date of this Official Statement.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their 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 2021 Bonds have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), in reliance upon exemptions contained in the Securities Act. Any registration or qualification of the 2021 Bonds in accordance with applicable provisions of the securities laws of the states in which the 2021 Bonds have been registered or qualified and the exemption from registration or qualification in other states cannot be regarded as a recommendation thereof.

Upon issuance, the 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 Indenture been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon exemptions contained in such acts.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE 2021 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION, NOR HAS THE SECURITIES AND EXCHANGE COMMISSION (THE "SEC") OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The order and placement of information in this Official Statement, including the appendices, are not an indication of relevance, materiality or relative importance, and this Official Statement, including the appendices, must be read in its entirety. The captions and headings in this Official Statement are for convenience only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provision or section in this Official Statement.

Capitalized terms and phrases not otherwise defined herein shall have the meanings ascribed to them in the Master Indenture unless the context clearly otherwise requires. A copy of the Master Indenture is included as Appendix C hereto.

This Official Statement contains "forward-looking statements" within the meaning of the federal securities laws, including without limitation statements in the sections hereof entitled "THE TERMINAL MODERNIZATION PROGRAM," "THE AIRPORT," "REPORT OF THE AIRPORT CONSULTANT" and APPENDIX B. These forward-looking statements include, among others, statements concerning expectations, beliefs, opinions, future plans and strategies, anticipated events or trends and similar expressions concerning matters that are not historical facts. The forward-looking statements in this Official Statement are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in or implied by such statements.

This Official Statement contains forecasts, projections and estimates that are based on current expectations. In light of the important factors that may materially affect the financial condition of the Authority and the aviation industry generally and other economic and financial matters, the inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the Authority or the Underwriters that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results.

The Authority deems this Official Statement to be final for purposes of SEC Rule 15c2-12(b)(3).

References to website addresses presented herein, including the website maintained by the Authority, 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, including without limitation the Authority's website, 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 Authority 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 Authority 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 Authority. 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 2021 Bonds.

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.MUNIOS.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.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the 2021 Bonds or the advisability of investing in the 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 G - Specimen Municipal Bond Insurance Policy".

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Official Statement
Relating to
Allegheny County Airport Authority
(Pittsburgh International Airport)

$719,850,000
Airport Revenue Bonds Series 2021A (AMT)

$112,820,000
Airport Revenue Bonds Series 2021B (Non-AMT)

INTRODUCTION

This Official Statement, including the cover page and Appendices hereto, is furnished in connection with the offering by the Allegheny County Airport Authority (the "Authority") of $719,850,000 aggregate principal amount of Allegheny County Airport Authority (Pittsburgh International Airport) Airport Revenue Bonds, Series 2021A (AMT) (the "2021A Bonds") and $112,820,000 aggregate principal amount of Allegheny County Airport Authority (Pittsburgh International Airport) Airport Revenue Bonds, Series 2021B (Non-AMT) (the "2021B Bonds" and, together with the 2021A Bonds, the "2021 Bonds").

The Authority is a body corporate and politic existing under the laws of the Commonwealth of Pennsylvania (the "Commonwealth") pursuant to the Municipality Authorities Act, Act 22 of 2001, as amended (53 Pa. C.S.A. § 5601 et seq.) (the "Act"), having been duly organized by the County of Allegheny, Pennsylvania (the "County") on June 17, 1999. See "THE AUTHORITY" herein.

The Authority leases and operates two airports, the Pittsburgh International Airport (the "Airport") and the Allegheny County Airport (the Airport and the Allegheny County Airport are collectively referred to herein as the "Airport System"). On November 15, 1999, pursuant to an Airport Operation, Management and Transfer Agreement and Lease dated September 16, 1999 between the County and the Authority, as amended (the "Transfer Agreement"), the County transferred and leased the Airport System to the Authority for a term of 25 years with two 25-year extension options exercisable at the option of the Authority (such transfer and lease is referred to herein as the "Transfer"). The Authority intends to exercise its option to extend the term of the Transfer Agreement for an additional 25 year renewal term. There are no preconditions to the Authority's exercise of its options to extend other than providing notice within the last year of the applicable term to the County of its exercise. No action is required by the County or any third party to extend the Transfer Agreement. See "TRANSFER OF THE AIRPORT SYSTEM TO THE AUTHORITY" herein.

The proceeds of the 2021 Bonds, together with other funds available therefor, will be used to (a) pay costs of the Authority's Terminal Modernization Program (the "TMP"), the Airside Terminal Renovations (as defined hereinafter) and Airline Fit-Outs (as defined hereinafter) as described herein under "THE TERMINAL MODERNIZATION PROGRAM," including repayment of all or a portion of the outstanding principal balance under the PNC Line of Credit (as described hereinafter) as of the date of issuance and delivery of the 2021 Bonds (as described herein), which was used to pay certain costs of the TMP, (b) fund capitalized interest on the 2021 Bonds, (c) fund the Common Debt Service Reserve Account in the Debt Service Reserve Fund, and (d) pay the costs of issuance of the 2021 Bonds. See "THE PLAN OF FINANCE" herein.

The 2021 Bonds will be issued pursuant to a Master Trust Indenture dated as of December 1, 2019, as amended from time to time and as supplemented by a First Supplemental Indenture dated as of December 1, 2019, as amended (together, the "Master Indenture"), and as supplemented and amended by the Second Supplemental Indenture dated as of August 1, 2021 (the "Second Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), each between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"). The 2021 Bonds will be secured by a pledge of Net Revenues (as defined in the Master Indenture). See "SECURITY FOR THE 2021 Bonds." Pursuant to the First Supplemental Indenture, the Authority issued subordinated promissory notes (the "Subordinate Series 2019 Notes") to PNC Bank, National Association ("PNC Bank") to secure a revolving line of credit in the original maximum principal amount of $200,000,000 (the "PNC Line of Credit"). The amount available under the PNC Line of Credit was reduced to $100,000,000 on December 1, 2020 and subsequently increased to $150,000,000 effective December 30, 2020. The PNC Line of Credit matures on December 22, 2022 unless otherwise extended pursuant to the terms of the loan agreement relating to the PNC Line of Credit. See "OUTSTANDING DEBT OF THE AUTHORITY – Subordinate Obligations."

The Second Supplemental Indenture provides for certain amendments to the Master Indenture, which will become effective upon the consent of not less than 51% in the aggregate of Bondholders. By acceptance of a confirmation of purchase of the 2021 Bonds, each Bondholder will be deemed to have consented to the amendments to the Master Indenture described herein. See "AMENDMENTS TO THE MASTER INDENTURE" herein.

One of the amendments to the Master Indenture will permit the Authority to exclude from the definition of "Revenues" (1) any gifts, grants, reimbursements or payments received for the Airport System's benefit unless designated as and included in Other Pledged Revenues (as such term is defined in the Master Indenture) and (2) amounts on deposit in the Coverage Account established under the Master Indenture. Upon the issuance of the 2021 Bonds, 100% of Bondholders will have consented to the amendments to the Master Indenture, and as such the amendments will become effective. See "AMENDMENTS TO THE MASTER INDENTURE" herein.

The 2021 Bonds are limited obligations of the Authority. The principal of, interest on and premium, if any, on the 2021 Bonds are payable by the Authority only out of Net Revenues and from such other moneys as may be available under the Indenture for such purpose. Neither the general credit of the Authority nor the credit or taxing power of the County, the Commonwealth or any political subdivision thereof is pledged for the payment of the 2021 Bonds. The 2021 Bonds shall not be or be deemed a general obligation of the Authority or an obligation of the County, the Commonwealth or any political subdivision thereof. The Authority has no taxing power.

Capitalized terms used in this Official Statement which are defined in the Master Indenture shall have the meanings ascribed to them in the Master Indenture. Certain such capitalized terms are accompanied by abbreviated definitions herein and reference is hereby made to the Master Indenture for complete definitions of such terms. See APPENDIX C – "FORM OF MASTER INDENTURE – ARTICLE I, DEFINITIONS; INTERPRETATION".

THE PLAN OF FINANCE

Proceeds from the sale of the 2021 Bonds will be applied by the Authority to (a) pay costs of the TMP, the Airside Terminal Renovations and the Airline Fit-Outs, as described herein under "THE TERMINAL MODERNIZATION PROGRAM," including repayment of all or a portion of the outstanding principal balance under the PNC Line of Credit as of the date of issuance and delivery of the 2021 Bonds, which was used to pay certain costs of the TMP, (b) fund capitalized interest on the 2021 Bonds, (c) fund the Common Debt Service Reserve Account in the Debt Service Reserve Fund, and (d) pay the costs of issuance of the 2021 Bonds. See APPENDIX B – REPORT OF THE AIRPORT CONSULTANT for additional information about the Terminal Modernization Program, the Airside Terminal Renovations and the Airline Fit-Outs.

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ESTIMATED SOURCES AND USES OF 2021 BOND PROCEEDS

The estimated sources and uses of proceeds of the 2021 Bonds are as follows:

Sources of Funds	2021A Bonds	2021B Bonds	Total
Par Amount of Bonds	$719,850,000.00	$112,820,000.00	$832,670,000.00
Premium/(Discount)	157,775,464.15	28,562,310.80	186,337,774.95
Total Sources of Funds	**$877,625,464.15**	**$141,382,310.80**	**$1,019,007,774.95**
Uses of Funds			
TMP Costs	$614,809,152.15	$108,903,259.81	$723,712,411.96
Airside Terminal Renovations Costs and Airline Fit-Outs Costs	39,500,000.00	--	39,500,000.00
Repayment of PNC Line of Credit	63,964,298.72	6,714,484.40	70,678,783.12
Capitalized Interest	112,347,263.89	18,158,273.61	130,505,537.50
Debt Service Reserve Fund	43,585,398.77	7,021,451.23	50,606,850.00
Issuance Costs*	3,419,350.62	584,841.75	4,004,192.37
Total Uses of Funds	**$877,625,464.15**	**$141,382,310.80**	**$1,019,007,774.95**

* Includes legal fees, underwriting compensation, bond insurance premium, rating agency fees, trustee fees, financial advisor and consultant fees, printing expenses and other miscellaneous fees and expenses.

THE TERMINAL MODERNIZATION PROGRAM

Summary of the Terminal Modernization Program (TMP)

In 2017, the Authority approved a master plan for the Airport which identified the need to right-size and modernize the Airport's terminal facilities. The existing terminal was designed and constructed in the late 1980s and early 1990s in close cooperation with the former US Airways (the then dominant carrier at the Airport) to accommodate its hubbing operations. The terminal complex was therefore designed to handle high volumes of connecting traffic. The Airport no longer serves as a major hub, with US Airways ending its hubbing operations in 2004. Traffic at the Airport is now comprised of approximately 98% origination and destination ("O&D") passengers, and is now served by a diversified portfolio of airlines. Because the Airport is no longer a hub, the existing terminal facilities far exceed the current level of activity in some respects, and in other respects, are undersized for a busy O&D market. In addition, building systems such as elevators, escalators, mechanical, electrical, and communications that became operational in 1992 are reaching or have reached the end of their respective service lives. Furthermore, other aspects of the terminal are causing capacity issues in the security screening areas.

The Terminal Modernization Program (the "TMP") will replace the existing landside terminal at the Airport with a new landside terminal and associated facilities (including roadways, parking, rental car facilities) including a tri-level roadway system and a Multi-Modal Complex ("MMC") for parking and rental car facilities. The TMP was designed to balance airside and landside terminal operations and requirements to serve the current and future makeup of passenger demand and capacity of the Airport. It will also (1) align evolving customer requirements with capacity using new technology, (2) expand, realign, and/or renovate congested terminal facilities in a cost-effective and operationally efficient manner, and (3) improve building system functionality for a terminal facility reaching the end of its useful life.

Initially, the Authority planned to start construction of the TMP in mid-2020, but due to the pandemic construction was put on hold while design was continued to the 90% level. During the year-long pause, the Authority instructed its designers to refine the TMP design and operational plans to include public health and safety features to address new concerns created by the pandemic. The expected date of beneficial occupancy ("DBO") of the new landside terminal and associated facilities is late 2024 or early 2025.

The new landside terminal will be built adjacent to the existing airside terminal. As the first new terminal constructed in the post-COVID-19 era, it has been designed with special considerations and flexibility, including physical spacing, touchless technology, and HVAC building systems. Construction and operation of the new terminal building and MMC have also been designed to comply with the Leadership in Energy and Environmental Design ("LEED") standards for building materials while also seeking to reduce use of energy and water and minimize waste, as well as to reduce emission of pollutants. Further, it was designed with input from public health experts in light of the pandemic. The TMP design was also influenced by extensive collaboration and coordination over the past five years with the airlines and their Airline Technical Representative (as defined in the Airline Operating Agreement as defined hereinafter). The TMP has been designed to balance airside and landside terminal operations to serve current and projected passenger demand and capacity requirements as well as improve building system functionality for an airside terminal reaching the end of its useful life. The TMP is estimated to be completed in late 2024 or early 2025 at a cost of approximately $1.39 billion, including construction, design, project and construction management, contingencies, and escalation (based on approximately 95% design completion as of July 2021).

Elements of the TMP, Airside Terminal Renovations and Airline Fit-Outs

Elements of the TMP include the following:

1. *Site Development* – Clearing and grading the site for the new landside terminal complex, constructing access roadways, and installing utilities to accommodate the new landside terminal; upgrades to the central utility plant to provide hot and chilled water and upgraded electrical service to the new terminal through new electrical switchgear; relocating fire and domestic pipelines, natural gas lines, fiber optic communications lines and electrical duct banks; site grading and drainage; fencing; and developing an exclusive-use TMP construction access road and temporary construction staging areas to separate construction traffic from the traveling public.

2. *Terminal Roadways* – Modifying the existing Airport roadway network to provide access to the new landside terminal, parking garage, surface parking, rental car center and related Airport facilities; constructing elevated roadways to provide vehicular access to the terminal's arrival and departures levels; and constructing an at-grade roadway to provide commercial vehicular access to the terminal.

3. *Terminal Buildings* – Constructing a new replacement landside terminal building comprising approximately 696,055 square feet that will include a curbside ticketing lobby, Transportation Security Administration ("TSA") passenger security screening checkpoint, TSA in-line Checked Baggage Inspection System, curbside bag check area, baggage claim areas, a connection to the airside terminal US Customs & Border Protection facilities (Federal Inspection Services), concessions, a covered commercial curb (for hotel, parking and off-Airport shuttles as well as connection capabilities to public transportation), and associated public areas and support functions. This project component also includes modifying the existing airside building to create a seamless travel experience with the new landside terminal, including (a) decommissioning the existing automated people-mover and baggage tunnels, (b) renovating approximately 160,876 square feet of existing space to connect the two buildings for circulation and vertical conveyances, (c) reconfiguring the existing international arrivals facilities to meet current federal requirements and guidelines, (d) replacing Authority office space currently located in the existing landside terminal, and (e) upgrading various types of support spaces.

4. *Baggage Handling System and Airline Equipment and Finishes* – Installing equipment to address air carrier operations in the landside terminal, including communications infrastructure, a common use system for certain ticket counters that will be owned and maintained by the Authority, information display systems, common use inbound and outbound baggage handling systems, and applicable tenant finishes.

5. *Parking and Ground Transportation Facilities* – Constructing an integrated MMC housing a multi-level parking structure, rental car facilities, surface parking. The new parking garage will accommodate approximately 3,300 public parking spaces and will provide access to the landside terminal via a ground level covered pedestrian walkway and customer service building for rental car customers. The first level of the garage will be dedicated to rental car ready/return operations. A covered commercial curb at the terminal's ground level will provide curb access for hotel, parking, and off-Airport rental car shuttles and public transportation. Close-in public surface parking with approximately 2,700 parking spaces and approximately 850 employee parking spaces will be located within walking distance of the terminal. At this time, potential uses for the area behind the garage are still under consideration by the

Authority, with such uses potentially including additional surface parking, commercial development, and/or a rental car service area (to the extent the rental car companies fund or provide a backstop for any associated debt).

While discussing the scope, design, and budget for the TMP, the Authority and the airlines decided to advance the construction of certain renovations to the existing airside terminal (the "Airside Terminal Renovations") to allow these improvements to be performed concurrently with the construction of the new landside terminal complex while contractors are mobilized and thereby reduce construction costs. The estimated cost of such improvements totals $90 million and will likely include projects such as: replacing existing pre-conditioned air systems for the gates; holdroom (gate area) renovations; restroom remodeling; mechanical, electrical, and plumbing upgrades; flooring upgrades; jetway preconditioned air system replacements; conveyance upgrades; flight information display screen upgrades; lighting panel retrofits; furniture floor outlets; the airside terminal's center core area renovations; skylight replacements; paging system upgrades; various IT improvements; and sewage piping and interceptor replacements.

In addition to advancing the Airside Terminal Renovations, at the request of the airlines, the Authority also agreed to finance the cost of certain airline tenant finishes and fit-outs that will bring them to a move-in ready condition (the "Airline Fit-Outs") for preferential leased premises in the new terminal. The estimated costs of such improvements total approximately $14.9 million.

The new landside terminal will be located adjacent to and will be connected directly to the existing airside terminal, eliminating the need for the existing underground automated people-mover system. Certain holdrooms and gate areas on the west ramp of the airside terminal were decommissioned in 2019 to allow for the construction of the new landside terminal and its connection to the airside terminal. The independent nature of the landside and airside terminals will allow for construction of the new landside terminal and other components of the TMP while still maintaining existing operations.

The Authority has strived to avoid or minimize environmental impacts and has obtained its General Permit for the TMP from the Allegheny County Conservation District. In addition, the Authority has paid into the Commonwealth's "in-lieu program" to compensate for unavoidable impacts. If environmental mitigation is required, the Authority will work with a "mitigation bank" to acquire any necessary mitigation credits for any necessary mitigation credits, e.g. purchasing a site approved by regulatory agencies containing wetlands and streams to offset unavoidable environmental impacts. The Authority also has in place procedures and plans for managing any suspect material should they be encountered during the construction of the TMP. The Authority has received a Finding of No Significant Impact by the Federal Aviation Administration (the "FAA") for the TMP Environmental Assessment, as well as approval of the environmental re-evaluation submitted to the FAA after some minor changes were made to the areas of impact associated with the program. The Authority continues to work with all regulatory agencies having jurisdiction over other permitting areas in order to minimize project-related impacts.

Project Management of the TMP

The Authority has assembled program management and design teams with extensive experience and expertise in aviation capital projects to collaborate on the delivery of the TMP.

Paslay Management Group, a professional management firm specializing in large, complex aviation capital developments, has been retained to assist the Authority with Executive Program Management and Program Controls. Jacobs, a global aviation consultancy firm that has held contracts on more than 500 airport projects, was engaged by the Authority to provide program management and project support services.

Design

The firms of Gensler, headquartered in San Francisco, California, and HDR, headquartered in Omaha, Nebraska, in association with luis vidal + architects, headquartered in Madrid, Spain, have entered into a joint-venture agreement to provide the Authority with architectural design and engineering services for the new landside terminal.

Michael Baker International, headquartered in Pittsburgh, Pennsylvania with 100 offices nationwide, has been engaged by the Authority as the architectural and engineering team to design the ground transportation MMC being constructed as part of the TMP.

Construction Management and Testing

PJ Dick/Hunt will provide construction management agency services for the new terminal. Turner Construction will provide construction management agency services for the MMC. Both firms have extensive experience in the aviation market.

In addition, the Authority retained separate quality assurance testing services firms for the terminal and MMC packages.

Project Schedule

Design of the TMP commenced in September 2018, was 60% complete as of March 2020, and as of July 2021 was approximately 95% complete. Initial construction packages for the terminal are complete and ready to bid. Early site access has commenced. The Authority has received bids and awarded contracts for the acquisition of structural steel for the TMP, foundation packages for the TMP, and underground electrical and plumbing work. Construction is expected to commence in August 2021 for the steel and foundations and in September 2021 for the underground electrical and plumbing. Construction bids for TMP components representing approximately 83% of total project costs are expected to be awarded by the end of 2021. The expected DBO of the new landside terminal and associated facilities is projected to be late 2024 or early 2025.

Once the new terminal is operational, alternative uses for the existing landside terminal will be pursued. If an alternative use for the existing landside terminal is not identified, than the existing landside terminal would be demolished and the automated people-mover will be abandoned in place. The TMP budget includes funds for such demolition. The Authority intends to retain the existing garage and surface parking lots for public or employee parking or to support potential alternative uses of the landside terminal.

Owner Controlled Insurance Program

The Authority engaged Alliant in early 2019 to operate an owner controlled insurance program for the TMP to ensure consistency of coverage for all contractors, as well as a consistent, coordinated safety management plan. The safety management plan includes a safety and security orientation, mandatory drug testing with both pre-employment and random testing, on-site medical services, and other requirements for all contractors on the construction site. The Authority has also hired a new Vice President of Safety who will be responsible for coordinating all safety activities on the program.

Impact of Construction on Airport Operations

A major advantage of the location of the TMP and the Airport's expansive campus is that nearly all of the TMP construction site can be isolated from active airport operations with the exception of the renovation work that will be happening in the airside terminal. The site plan isolates the construction site, equipment, and haul routes from active airfield operations and from secure areas for the traveling public, where almost all the construction traffic (equipment and personal vehicles) remains off the airport roadways. Minimal impacts are anticipated to public roadways, airside taxiways and runways, terminal ramp areas, and daily operations during construction.

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Estimated Funding Sources for the TMP, Airside Terminal Renovations and Airline Fit-Outs

The table below presents the estimated funding sources for the funding of the TMP, Airside Terminal Renovations and Airline Fit-Outs:

Sources of Funds (in thousands):

Bond Proceeds	$1,255,549
Federal Grants	14,600
Passenger Facility Charge ("PFC") Pay-As-You-Go	78,165
Customer Facility Charge ("CFC") Pay-As-You-Go	61,382
Authority Funds[1]	21,005
Reimbursement of Debt[2]	20,570
Total	$1,451,271

Uses of Funds (in thousands):

New Landside Terminal	$1,040,126
Multimodal Center	306,213
Airside Terminal Renovations	90,000
Airline Tenant Fit-outs	14,932
Total	$1,451,271

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1 Authority funds may include amounts in the Airport System Capital Fund described herein as well as designated portions of the Authority's Gaming Revenues and Natural Gas Revenues.

2 Represents a portion of the outstanding principal and interest on the PNC Line of Credit to be refunded with Federal COVID-19 Grants.

The Sources of Funds shown in the table above are those sources that are expected to be used to pay the construction costs of the TMP, Airside Terminal Renovations and Airline Fit-Outs. The Authority also intends to designate certain additional PFCs as PFCs Available for Debt Service and to designate certain CFCs as Other Pledged Revenues, and use such amounts to pay a portion of the debt service on the Bonds issued to fund the TMP. Further, the Authority may elect to designate a portion of certain additional funds (possibly including Federal COVID-19 Grants, Gaming Revenues and Natural Gas Revenues) as "Other Pledged Revenues" which may also be used to pay a portion of the debt service on the Bonds issued to fund the TMP and/or to pay operating and maintenance expenses. See "SECURITY FOR THE 2021 BONDS – Pledge of Net Revenues and Other Pledged Revenues."

The Authority also has the PNC Line of Credit in place, which the Authority is able to use to provide funding for the TMP on an interim basis. The Authority intends to repay all or a portion of the amounts drawn under the PNC Line of Credit from the proceeds of Bonds issued under the Master Indenture, Federal COVID-19 Grants, or other available funds of the Authority prior to the completion of construction of the TMP.

Finally, the Authority is considering applying for a loan through the U.S. Department of Transportation's Transportation Infrastructure Finance and Innovation Act ("TIFIA") credit program to finance certain elements of the TMP. The Authority anticipates that any such loan would be a Subordinate Obligation under the Master Indenture. The Authority cannot predict at this time whether such a loan will be received or, if received, the principal amount of such loan. If a TIFIA loan is obtained, such loan is expected to have a positive impact on the economics of the TMP.

IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT

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 Authority 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 Authority's Rule 15c2-12 undertakings.

Background.

COVID-19, a respiratory disease caused by a new strain of coronavirus, was declared a public health emergency on January 30, 2020 and a global pandemic on March 11, 2020 by the World Health Organization. Since the Executive Proclamation by the President of the United States on January 31, 2020, preventing entry into the United States by certain foreign nationals, there has been a focus on containing the disease by prohibiting non-essential travel and limiting person-to-person contact. Across the United States, states and local governments, including the Commonwealth and the County, initially issued "stay at home" or "shelter in place" orders, which severely restricted movement and limited businesses and activities to essential functions. While many of these orders have been lifted, there remain restrictions in place throughout the United States to varying degrees and a resurgence of the virus may cause further restrictions to be imposed. The Delta variant, which the Centers for Disease Control and Prevention ("CDC") reported on July 22, 2021 to account for over 80% of new cases in the United States, is causing increasing concern. At this time, however, it is not known to what degree, if any, it will bring about further restrictions or economic dislocation. Additionally, a number of nations effectively closed their borders by restricting entry and exit to only essential travel and/or requiring travelers to self-isolate for 14 days, further depressing demand for passenger air travel.

On March 6, 2020, Pennsylvania Governor Tom Wolf declared a disaster emergency in the Commonwealth followed by issuance of an order on March 19, 2020 to temporarily close all non-life-sustaining businesses in Pennsylvania. On April 1, 2020, the Governor issued a stay-at-home order for all counties in the Commonwealth with respect to all activities, except as needed to access, or provide life-sustaining activities. The Governor subsequently lifted the stay at home order and allowed businesses to reopen, with certain limitations, on a county-by county basis based upon a color-coded three-phased Plan to Reopen PA. In the County, County Executive Rich Fitzgerald issued an Emergency Declaration for Allegheny County. Following that declaration, Allegheny County's Health Department Director issued a series of targeted mitigation orders (mirroring similar orders at the state-level) with additional restrictions on certain businesses such as bars and restaurants and continued restrictions on public gatherings. Effective June 28, 2021, all such Commonwealth and County restrictions have been lifted.

The COVID-19 pandemic and resulting restrictions, including reductions in flights and declines in passenger volumes, as well as the broad-based economic shutdown resulting from efforts to stop the spread of COVID-19, including the mandated closure of businesses and offices, work-at-home requirements, prohibitions of public gatherings, quarantines, and travel restrictions, have severely disrupted, and continue to disrupt, airports in the United States, including the Airport. Airlines, including those operating out of the Airport, have experienced unprecedented downturns in passenger volumes, causing the cancellation of numerous flights and a dramatic reduction in network capacity. In response, airlines have reduced the size of aircraft operating on certain routes and reduced flights in an attempt to match capacity to the reduced demand for air travel. The outbreak has had an adverse effect on a number of other travel related industries as well.

According to the 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 Commonwealth, vaccine distribution for frontline healthcare workers began in mid-January. Over the following several months, residents of the Commonwealth 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 individuals 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 (such as the Delta variant) 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, may 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.

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 Authority 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 Airport and airline travel continues be difficult to predict at this time.

For further detailed information regarding the impact of the COVID-19 pandemic on the Commonwealth's economy, the aviation industry and the Airport, see APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT."

Impact of COVID-19 on the Airport.

As described above, the outbreak of COVID-19 and related travel and other restrictions have had an adverse effect on airlines serving the Airport, retail concessionaires and other operators at the Airport and revenues of the Airport as more fully set forth in this Official Statement and in APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT." Historical patterns of passenger and cargo traffic at the Airport were dramatically disrupted by the emergence of the COVID-19 pandemic in early 2020, and the Airport experienced a sharp contraction in activity beginning in March 2020. Enplaned passengers at the Airport decreased by 62.8% in 2020 as compared to 2019, which followed the prior year's 1.2% increase over 2018. However, during the first half of 2021, particularly beginning in March 2021, the level of enplaned passengers has grown on a month-by-month basis. Enplaned passengers for June 2021 were 316% higher than in June 2020, while 30% less than in June 2019. This trend is similar to the trend for the U.S. as a whole. The impact of the Delta variant on this uptrend, if any, is not known at this time.

In response to the significant decline in enplaned passengers in the U.S. generally and at the Airport during the ongoing COVID-19 pandemic, the airlines at all airports, including the Airport, reduced the number of daily flights and air service in kind. As of June 2021, all of the domestic airlines operating at the Airport have continued service at the Airport, although at reduced capacity. The following table shows the number of enplaned passengers for each month from January 2019 through June 2021.

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Month	2019	2020	2021
January	327,605	336,827	107,785
February	319,682	340,727	116,798
March	413,440	185,198	183,237
April	399,749	15,928	209,809
May	439,144	47,074	275,302
June	449,313	98,893	312,290
July	456,314	125,088	
August	431,924	128,621	
September	393,430	120,284	
October	438,575	152,612	
November	393,216	137,133	
December	412,637	124,019	
Total	4,875,029	1,824,404	1,204,647

Source: Allegheny County Airport Authority records.

For further detailed information regarding the impact of the COVID-19 pandemic on the numbers of enplaned passengers at the Airport in 2020 and 2021 and the effect on scheduled airline service at the Airport, see APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT – Historical Airline Service and Traffic."

The significant declines in passenger traffic associated with the COVID-19 pandemic have also had a negative financial impact on non-airline revenue sources, including parking, rental car and other ground transportation revenues and terminal concessions. In particular, parking revenues, which historically have represented the largest component of non-airline revenues at the Airport, decreased significantly in 2020 and for the first six months of 2021 compared to 2019.

The Authority believes that the Airport's diversified portfolio of airlines, including major network carriers, low cost carriers, and ultra low-cost carriers, have helped to mitigate the pandemic's impact on the Airport. American Airlines and Southwest Airlines traded positions several times during 2020 as the market share leader at the Airport. Before the pandemic, 1 in 10 passengers at the Airport were flying on an ultra low-cost carrier, with the ratio during the first six months of 2021 being closer to 1 in 5.

The following information is provided to reflect percentage variances for certain operating and financial data of the Authority for 2020 as compared to 2019.

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	2019	2020	Percentage Change
Landing fees / terminal area airline rentals and fees	$59,055,103	$47,156,553	(20.1%)
Parking revenues	41,631,005	13,711,988	(67.1%)
Rental car revenues	12,510,219	7,933,045	(36.6%)
Terminal concessions*	10,707,375	8,281,487	(22.7%)
Total operating revenues	144,562,495	97,511,691	(32.5%)
Total operating expenses	179,791,081	180,824,942	0.1%
Customer facility charges	9,536,624	4,585,923	(51.9%)
Passenger facility charges	18,979,556	6,945,191	(63.4%)
Total nonoperating revenues, net	49,087,873	43,809,124	(10.8%)
Enplaned passengers	4,875,029	1,812,404	(62.8%)
Cargo landed weight (1,000 lbs.)	6,263,255	3,703,501	(40.9%)
Cargo volume (1,000 lbs.)	165,517	157,603	(5.0%)

* The decline in concession revenues was limited to 22.7% due to a write-off of certain fees payable by concessionaires that were not paid, thus offsetting the revenue losses due to the decrease in enplaned passengers.

In the near-term to medium-term, the impact of the COVID-19 pandemic and the speed of recovery of both the economy and public confidence in the aviation system are expected to significantly affect aviation activity levels at the Airport and there is uncertainty regarding the length of time it will take for aviation activity levels to recover to 2019 levels.

The Authority cannot predict (i) the duration of and recovery from COVID-19, (ii) the duration or expansion of travel restrictions and warnings, (iii) whether additional countries or destinations, including domestic destinations, will be added to the travel restrictions or warnings, (iv) what effect such travel restrictions and warnings may have on air travel to and from the Airport, (v) whether and to what extent COVID-19 may further disrupt the local or global economy, manufacturing or supply chains, or whether any such disruption may adversely impact construction or other operations at the Airport, (vi) the extent to which COVID-19 may result in changes in demand for travel, or may have an impact on the airlines serving the Airport, concessionaires at the Airport or the airline and travel industry generally, (vii) the duration and extent of the economic contraction and high unemployment resulting for measures adopted to contain the spread of the virus, or (viii) whether any of the foregoing may have a material adverse effect on the finances and operations of the Airport.

For further detailed information on the impact of COVID-19 on air travel through the Airport and the Authority's budget and finances, see "THE AIRPORT", "FINANCIAL INFORMATION – Management's Discussion of Recent Financial Results", APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT – Key Factors Affecting Future Airline Traffic" and APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT – Aviation Activity Projections."

Summary of Actions Taken in Response to COVID-19.

During the pandemic, the Authority implemented a series of measures to control and reduce operating costs, defer capital costs, and increase terminal hygiene to instill customer confidence in traveling from the Airport, including:

- Reducing operating and maintenance expenses, including early retirement and voluntary furlough programs for Authority staff
- Temporarily closing the extended term parking lot and suspending associated parking shuttles
- Deferring and reducing non-critical capital expenditures
- Implementing a "PIT Safe Travels" program to ensure the health, safety, and security for the traveling public, tenants, and staff
- Implementing COVID-19 testing for staff and passengers

- Increasing the cleaning of all public spaces, equipment, restrooms, and holdroom seating, as well as utilizing UV lighting on floor scrubbers
- Implementing touchless technology throughout the terminal complex
- Requiring anyone entering an airport facility to wear a mask
- Adding physical distancing reminder signs throughout all facilities
- Formulating a preliminary plan to apply COVID-19 relief grants
- Pausing construction of the TMP for one year while continuing to develop the design

Government Stimulus and Relief Measures.

Subsequent to the COVID-19 outbreak in March 2020, legislation was passed on three separate occasions to partially offset the negative financial impacts of COVID-19. The Coronavirus Aid, Relief, and Economic Security (CARES) Act (H.R. 748, Public Law 116-136) (the "CARES Act"), signed into law on March 27, 2020, included $10 billion in funds to be awarded as economic relief to eligible U.S. airports affected by the COVID-19 pandemic. The Authority was awarded $36.2 million under this legislation and accepted and executed agreements for the grants awarded. The funds are to be utilized within four years, with a key focus on operating costs and debt service, but may be used for any purpose for which airport revenue may lawfully be used. During 2020, the Authority utilized $10.5 million of the CARES Act funding to partially offset reductions in revenue caused by the pandemic. Other revenue losses were mitigated by reducing operating expenses and deferring capital spending. CARES Act grants may be used for any purpose for which airport revenues may lawfully be used. The Authority expects to apply $8.2 million of its CARES Act grant funds to pay down the PNC Line of Credit in 2021, and expects to apply the balance to pay eligible operating and maintenance expenses during fiscal years 2021 through 2024. In addition, the County allocated $2.0 million of its CARES Act funding to the Airport to pay for a portion of the expenses relating to police services at the Airport.

The Coronavirus Response and Relief Supplemental Appropriation Act ("CRRSA"), signed into law on December 27, 2020, includes nearly $2 billion in funds to be awarded as economic relief to eligible U.S. airports and eligible concessions at those airports. From this second relief package, the Authority was awarded $10.6 million, including $1.0 million in concessionaire relief. Under the CRRSA grant program, the Authority may use these funds to retain its workforce, make debt service payments or offset increased operational costs from enhanced mitigation efforts to limit the spread of COVID-19. The Authority expects to use its CRRSA grants to repay a portion of the principal and interest on the PNC Line of Credit in 2021.

The American Rescue Plan Act of 2021 (H.R. 1319, Public Law 117-2) ("ARPA"), a $1.9 trillion economic stimulus package designed to help the United States' economy recover from the adverse impacts of the COVID-19 pandemic, was signed into law on March 11, 2021. In addition to other economic relief, ARPA appropriates $8 billion to assist eligible U.S. airports in preventing, preparing for, and responding to COVID-19, and includes, among other things, funds to be used to provide relief from rent and minimum annual guarantees to airport concessions. The Authority has been allocated $35.9 million pursuant to ARPA, including an additional $4.0 million for concessionaire relief, and has submitted its grants to the FAA for approval. The Authority expects to use its ARPA grants to repay a portion of the principal and interest on the PNC Line of Credit in 2021 and pay eligible operating expenses potentially extending through 2024. The Authority is in the process of developing its ARPA concession program for submission to the FAA for approval.

Federal grants received under the CARES Act, CRRSA or ARPA are hereinafter collectively referred to as "Federal COVID-19 Grants". The Authority also expects to receive additional Airport Improvement Program ("AIP") grants in 2021 and 2022 under provisions of ARPA that extend the 100% federal match. Such additional AIP grants, the amounts of which have not yet been determined, will be used by the Authority as a source of funding for the CIP.

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.

The following table summarizes the Federal COVID-19 Grants received by the Authority, excluding the additional $2.0 million in CARES funding that was allocated to the Authority by the County.

SUMMARY OF FEDERAL COVID-19 GRANTS

Federal COVID-19 Relief Bill	Primary Airport Allocation	Concessions Relief (max)	Non-Primary Airports	Total
CARES Act				
Airport	$36,066,209	--	--	$36,066,209
Allegheny County Airport	--	--	$157,000	157,000
Total	**$36,066,209**	**--**	**$157,000**	**$36,223,209**
CRRSA				
Airport	$9,534,809	$1,010,033	--	$10,544,842
Allegheny County Airport	--	--	57,000	57,000
Total	**$9,534,809**	**$1,010,033**	**$57,000**	**$10,601,842**
ARPA				
Airport	$31,682,181	$4,040,132	--	$35,722,313
Allegheny County Airport	--	--	148,000	148,000
Total	**$31,682,181**	**$4,040,132**	**$148,000**	**$35,870,313**
Grant Total	**$77,283,199**	**$5,050,165**	**$352,000**	**$82,695,364**
Excluding Concession Relief	**$77,283,199**	**--**	**$352,000**	**$77,645,199**

Source: Federal Aviation Administration (as to amounts allocated to the Authority); Allegheny County Airport Authority (as to amounts provided by the County).

For further discussion of government stimulus and relief measures available to the Authority and the Airport in response to the COVID-19 pandemic, see APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT – COVID-19 Implications for the Airport"

AMENDMENTS TO THE MASTER INDENTURE

The Second Supplemental Indenture provides for certain amendments to the Master Indenture, which will become effective upon the consent of Bondholders holding not less than 51% in the aggregate of all outstanding Bonds. By acceptance of a confirmation of purchase of the 2021 Bonds, each holder of 2021 Bonds will be deemed to have consented to the amendments to the Master Indenture as described below:

(i) The following, including any investment earnings thereon, are specifically excluded from the definition of "Revenues": any gifts, grants, reimbursements or payments received for the Airport System's benefit unless designated as and included in Other Pledged Revenues; and amounts on deposit in the Coverage Account established under the Master Indenture.

(ii) The definition of "Other Pledged Revenues" will be amended to mean moneys, not constituting Revenues, that are designated, for any period, as Other Pledged Revenues pursuant to Section 4.18 of the Master Indenture. Other Pledged Revenues may include, but are not limited to, moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 of the Master Indenture, all or a portion of ***gifts, grants***, Customer Facility Charges, Gaming Revenues, and Natural Gas Revenues; however, PFCs Available for Debt Service may not be designated as or constitute Other Pledged Revenues.

(iii) Section 4.18 of the Master Indenture will be amended to read as follows: The Authority may for any period elect to designate any legally available funds, including but not limited to, all or a portion of ***gifts, grants***, Customer Facility Charges, Gaming Revenues and Natural Gas Revenues, as well as moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 of the Master Indenture, as Other Pledged Revenues.

> Upon the issuance of the 2021 Bonds, 100% of Bondholders will have consented to the amendments to the Master Indenture, and as such the above amendments will become effective.

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DESCRIPTION OF THE 2021 BONDS

General

The 2021 Bonds will be issued in denominations of $5,000 and integral multiples thereof ("Authorized Denominations"). The 2021 Bonds will be issued in fully registered form and will be registered in the name of Cede & Co., as registered owner and nominee of DTC. DTC will act as securities depository for the 2021 Bonds. Individual purchases may be made in book-entry form only. Purchasers will not receive certificates representing their interest in the 2021 Bonds purchased. So long as Cede & Co., as nominee of DTC, is the registered owner of the 2021 Bonds, references herein to the Bondholders or registered owners means Cede & Co. and does not mean the beneficial owners of the 2021 Bonds.

The Bank of New York Mellon Trust Company, N.A., as Trustee and Paying Agent, will pay principal of and interest on the 2021 Bonds. So long as DTC or its nominee, Cede & Co., is the registered owner of the 2021 Bonds, such payments will be made by wire transfer of New York clearing house or equivalent next day funds or by wire transfer of same day funds by the Trustee to Cede & Co., as nominee for DTC, which is required, in turn, to remit such amounts to the DTC participants for subsequent disbursement to the beneficial owners of the 2021 Bonds. Disbursement of such payments to DTC participants is the responsibility of DTC and disbursement to beneficial owners is the responsibility of DTC participants and indirect participants. See "APPENDIX F — DTC AND THE BOOK-ENTRY ONLY SYSTEM."

The 2021 Bonds will bear interest at the rates and mature on the dates set forth on the inside front cover page of this Official Statement. Interest will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The 2021 Bonds will be dated their initial date of delivery, and will bear interest from that date payable semi-annually on January 1 and July 1 of each year, commencing January 1, 2022 (each an "Interest Payment Date"). Interest due and payable on the 2021 Bonds on any Interest Payment Date will be paid to the person who is the registered owner as of the Record Date (as defined hereinafter) (DTC, so long as the book-entry system with DTC is in effect). Each 2021 Bond will bear interest from the Interest Payment Date next preceding the date of authentication thereof unless such date of authentication is an Interest Payment Date, in which event such 2021 Bond will bear interest from such date of authentication, or unless such date of authentication is after a Record Date and before the next succeeding Interest Payment Date, in which event such 2021 Bond will bear interest from such succeeding Interest Payment Date, or unless such date of authentication is on or before January 1, 2022, in which event such 2021 Bond will bear interest from its date of delivery. If interest on the 2021 Bonds is in default, 2021 Bonds issued in exchange for 2021 Bonds surrendered for transfer or exchange will bear interest from the last Interest Payment Date to which interest has been paid in full on the 2021 Bonds surrendered.

Interest payable on the 2021 Bonds on any Interest Payment Date will be paid to the registered owners in whose names the applicable 2021 Bonds are registered at the close of business on the June 15 or December 15 (each, a "Record Date") immediately preceding the relevant Interest Payment Date. In the event of any default in payment of interest due with respect to a 2021 Bond on an Interest Payment Date, such defaulted interest shall be payable to the person in whose name such 2021 Bond is registered at the close of business on a special record date for the payment of such defaulted interest, which shall be not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. Notice of such special record date and payment date shall be mailed by the Trustee to the registered owners of the 2021 Bonds not less than 10 days preceding such special record date, which shall be not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of notice from the Authority of the proposed payment.

Neither the Authority nor the Trustee shall be required to register the transfer or exchange of any 2021 Bond during the period commencing on a Record Date and ending on the corresponding Interest Payment Date.

During any period in which DTC or Cede & Co. is not the registered owner of the 2021 Bonds, the principal of, interest and premium, if any, on the 2021 Bonds shall be payable at the designated corporate trust office of the Trustee in

Pittsburgh, Pennsylvania, or such other designated office, in such coin or currency of the United States of America as at the time and place of payment is legal tender for public and private debts, provided that interest may be paid by checks drawn upon the Trustee mailed to the persons who are the registered owners on the Record Date immediately preceding the relevant Interest Payment Date at the address shown on the registration records for the 2021 Bonds (the "Bond Register") kept by the Trustee; provided, however, that interest shall be payable to any registered owner of at least $1,000,000 of the 2021 Bonds, by wire transfer in immediately available funds to an account designated by such registered owner if written or telephonic notice of any such election and designate account is given to the Paying Agent at least five (5) days prior to the Interest Payment Date as to which such election shall be effective.

During any period in which DTC or Cede & Co. is not the registered owner of the 2021 Bonds, any 2021 Bond may be transferred if endorsed for such transfer by the holder thereof and surrendered by such holder or his duly appointed attorney at the office of the Trustee, whereupon the Trustee shall authenticate and deliver to the transferee a new 2021 Bond or 2021 Bonds of the same series and maturity and in the same denomination as the 2021 Bond surrendered for transfer or in other Authorized Denominations of the same maturity equal in the aggregate to the principal amount of the surrendered 2021 Bond. The ownership of each 2021 Bond shall be recorded in the registration books of the Authority, which books shall be kept by the Trustee at its office and shall contain such information as is necessary for the proper discharge of the Trustee's duties under the Master Indenture as Trustee, registrar, Paying Agent and transfer agent. No service charge shall be made for any transfer or exchange of any 2021 Bond, but the Authority may require payment of any tax or other governmental charge that may be imposed in connection with any transfer or exchange of the 2021 Bonds.

Redemption Provisions

Optional Redemption

2021A Bonds. The 2021A Bonds maturing on or before January 1, 2031 are not subject to optional redemption prior to maturity. The 2021A Bonds maturing on or after January 1, 2032 are redeemable on or after January 1, 2031 at the option of the Authority, in whole or in part at any time, from any moneys that may be provided for such purpose and at a redemption price equal to 100% of the principal amount of the 2021A Bonds to be redeemed plus accrued interest to the date fixed for redemption, without premium.

2021B Bonds. The 2021B Bonds maturing on or before January 1, 2031 are not subject to optional redemption prior to maturity. The 2021B Bonds maturing on or after January 1, 2032 are redeemable on or after January 1, 2031 at the option of the Authority, in whole or in part at any time, from any moneys that may be provided for such purpose and at a redemption price equal to 100% of the principal amount of the 2021B Bonds to be redeemed plus accrued interest to the date fixed for redemption, without premium.

Mandatory Sinking Fund Redemption

2021A Bonds. The 2021A Bonds maturing on January 1 of the years 2046, 2051, 2056 (5.000% Interest Rate) and 2056 (4.000% Interest Rate) (the "2021A Term Bonds") are subject to mandatory sinking fund redemption in part, by lot, at a redemption price equal to 100% of the principal amount thereof, plus accrued interest thereon to the date fixed for redemption, without premium, on January 1 of the following years and in the following principal amounts:

2021A Term Bonds maturing 2046

Redemption Date (January 1)	Principal Amount
2042	$22,545,000
2043	23,445,000
2044	24,380,000
2045	25,355,000
2046*	26,370,000

* Maturity Date

2021A Term Bonds maturing 2051

Redemption Date (January 1)	Principal Amount
2047	$27,425,000
2048	28,795,000
2049	30,235,000
2050	31,750,000
2051*	33,335,000

* Maturity Date

2021A Term Bonds maturing 2056 (5.000% Interest Rate)

Redemption Date (January 1)	Principal Amount
2052	$17,415,000
2053	18,200,000
2054	19,020,000
2055	19,875,000
2056*	20,770,000

* Maturity Date

2021A Term Bonds maturing 2056 (4.000% Interest Rate)

Redemption Date (January 1)	Principal Amount
2052	$17,590,000
2053	18,375,000
2054	19,200,000
2055	20,065,000
2056*	20,970,000

* Maturity Date

2021B Bonds. The 2021B Bonds maturing on January 1 of the years 2046, 2051 and 2056 (the "2021B Term Bonds" and, together with the 2021A Term Bonds, the "2021 Term Bonds") are subject to mandatory sinking fund redemption in part, by lot, at a redemption price equal to 100% of the principal amount thereof, plus accrued interest thereon to the date fixed for redemption, without premium, on January 1 of the following years and in the following principal amounts:

2021B Term Bonds maturing 2046

Redemption Date (January 1)	Principal Amount
2042	$3,525,000
2043	3,665,000
2044	3,815,000
2045	3,965,000
2046*	4,125,000

* Maturity Date

2021B Term Bonds maturing 2051

Redemption Date (January 1)	Principal Amount
2047	$4,290,000
2048	4,505,000
2049	4,730,000
2050	4,965,000
2051*	5,215,000

* Maturity Date

2021B Term Bonds maturing 2056

Redemption Date (January 1)	Principal Amount
2052	$5,475,000
2053	5,750,000
2054	6,035,000
2055	6,335,000
2056*	6,655,000

* Maturity Date

At the option of the Authority, to be exercised by delivery of a written certificate to the Trustee on or before the 60th day next preceding any mandatory sinking fund redemption date for the 2021 Term Bonds, the Authority may (a) deliver to the Trustee, for cancellation, 2021 Term Bonds or portions thereof (in Authorized Denominations) purchased in the open market or otherwise acquired by the Authority or (b) specify a principal amount of such 2021 Term Bonds or portions thereof (in Authorized Denominations), which prior to said date have been optionally redeemed and previously cancelled by the Trustee at the request of the Authority and not theretofore applied as a credit against any mandatory sinking fund redemption requirement. Each such 2021 Term Bond or portion thereof so purchased, acquired or optionally redeemed and delivered to the Trustee for cancellation will be credited by the Trustee, at 100% of the principal amount thereof, against the obligation of the Authority to pay the principal of such applicable 2021 Term Bond on such mandatory sinking fund redemption date.

Notices of Redemption to Bondholders; Conditional Notice of Optional Redemption

The Authority can redeem 2021 Bonds pursuant to the Second Supplemental Indenture by notifying the Trustee of the applicable redemption provision, the redemption date, the applicable Series, the maturity date, the interest rate, the CUSIP number and the principal amount of the applicable 2021 Bonds to be redeemed and other necessary particulars. The Authority will give notice to the Trustee at least thirty-five (35) days before the redemption date, provided that the Trustee may, at its option, waive such notice or accept notice at a later date. The Trustee shall give notice of redemption, in the name of the

Authority, to Holders affected by redemption at least thirty (30) days but not more than sixty (60) days before each redemption date, send such notice of redemption by first-class mail (or with respect to 2021 Bonds held by DTC, either via electronic means or by an express delivery service for delivery on the next following Business Day) to each Holder of a Series 2021 Bond to be redeemed; each such notice shall be sent to the Holder's registered address.

Each notice of redemption shall specify the date of issue, the applicable Series, the maturity date, the interest rate and the CUSIP number of the applicable 2021 Bonds to be redeemed, if less than all 2021 Bonds of a Series, maturity date and interest rate are called for redemption, the numbers assigned to such 2021 Bonds to be redeemed, the principal amount to be redeemed, the date fixed for redemption, the redemption price, the place or places of payment, the Trustee's name, that payment will be made upon presentation and surrender of the applicable 2021 Bonds to be redeemed, that interest, if any, accrued to the date fixed for redemption and not paid will be paid as specified in said notice, and that on and after said date interest thereon will cease to accrue.

The Authority may provide that, if at the time of mailing of notice of an optional redemption there shall not have been deposited with the Trustee moneys and/or securities sufficient to redeem all the applicable 2021 Bonds called for redemption, such notice may state that it is conditional, that is, subject to the deposit of the redemption moneys with the Trustee not later than one Business Day prior to the scheduled redemption date, and such notice shall be of no effect unless such moneys are so deposited. In the event sufficient moneys and/or securities are not on deposit one (1) Business Day prior to the scheduled redemption date, then the redemption shall be canceled and on such cancellation date notice shall be mailed (or otherwise provided) to the Holders of such 2021 Bonds to be redeemed in the manner provided in this section.

Failure to give any required notice of redemption as to any particular 2021 Bonds will not affect the validity of the call for redemption of any 2021 Bonds in respect of which no failure occurs. Any notice sent as provided herein will be conclusively presumed to have been given whether or not actually received by the addressee. When notice of redemption is given, 2021 Bonds called for redemption become due and payable on the date fixed for redemption at the applicable redemption price. In the event that funds are deposited with the Trustee sufficient for redemption, interest on the 2021 Bonds to be redeemed will cease to accrue on and after the date fixed for redemption.

Effect of Redemption

On the date so designated for redemption, if (i) notice has been given in the manner and under the conditions provided in the Indenture and as described above and (ii) sufficient moneys for payment of the redemption price being held in trust to pay the redemption price:

(a) interest on such applicable 2021 Bonds will cease to accrue from and after such redemption date;

(b) such 2021 Bonds will cease to be entitled to any lien, benefit or security under the Indenture; and

(c) the owners of such 2021 Bonds will have no rights in respect thereof except to receive payment of the redemption price.

2021 Bonds which have been duly called for redemption and for the payment of the redemption price of which moneys will be held in trust for the holders of the respective 2021 Bonds to be redeemed, all as provided in the Indenture, will not be deemed to be Outstanding under the provisions of the Indenture.

Selection of 2021 Bonds for Redemption; 2021 Bonds Redeemed in Part

Redemption of the 2021 Bonds will only be in Authorized Denominations. The 2021 Bonds are subject to redemption in such order of maturity and interest rate within a Series (except mandatory sinking fund payments on the 2021 Term Bonds) as the Authority may direct and by lot within such maturity and interest rate of such Series selected in such manner as the Trustee (or DTC, as long as DTC is the securities depository for the 2021 Bonds) deems appropriate.

Except as otherwise provided under the procedures of DTC, on or before the 45th day prior to any mandatory sinking fund redemption date, the Trustee will proceed to select for redemption (by lot in such manner as the Trustee may determine) from the 2021 Term Bonds an aggregate principal amount of such 2021 Term Bonds equal to the amount for such year as set forth in the applicable table under "Mandatory Sinking Fund Redemption" above and will call such 2021 Term Bonds or portions thereof (in Authorized Denominations) for redemption and give notice of such call.

Book-Entry Only System

DTC will act as securities depository for the 2021 Bonds. The 2021 Bonds will be issued as fully registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of each Series of the 2021 Bonds in the aggregate principal amount of such maturity, and will be deposited with DTC. For more information regarding DTC and its procedures, see "APPENDIX F – DTC AND THE BOOK-ENTRY ONLY SYSTEM."

BOND INSURANCE

The information in this section concerning Assured Guaranty Municipal Corp. and the Insured 2021 Bonds has been obtained from AGM (as defined below). Neither the Authority nor the Underwriters take any responsibility for the accuracy thereof.

Bond Insurance Policy

Concurrently with the issuance of the Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy") for the 2021A Bonds maturing January 1, 2046 and the Series 2021B Bonds maturing January 1 of the years 2039, 2040, 2041 and 2046 (together, the "Insured 2021 Bonds"). The Policy guarantees the scheduled payment of principal of and interest on the Insured 2021 Bonds when due as set forth in the form of the Policy included as an appendix to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

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 July 8, 2021, 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 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 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 June 30, 2021:

- The policyholders' surplus of AGM was approximately $2,943 million.
- The contingency reserve of AGM was approximately $947 million.
- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately $2,137 million. Such amount includes (i) 100% of the net unearned premium reserve and deferred ceding commission income of AGM, and (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").

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and deferred ceding commission income of AGM 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);

(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); and

(iii) the Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2021 (filed by AGL with the SEC on August 6, 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 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 Insured 2021 Bonds or the advisability of investing in the Insured 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".

Rights of Bond Insurer

Pursuant to the Second Supplemental Indenture, AGM as insurer of the Insured 2021 Bonds is provided with certain rights in respect of the Insured 2021 Bonds for so long as the Policy is in effect and AGM is not in default under the Policy and has not otherwise rejected or denied the validity of the Policy, including without limitation: the right to consent to amendments, supplements or modifications to, or waivers of, the Indenture or any other transaction document, including any underlying security agreement ("Related Documents"), that requires the consent of Bond owners or adversely affects the rights and interests of AGM; the right to consent to the deposit of any Debt Service Reserve Fund Surety Policy (as defined in the Master Indenture) provided in lieu of a cash deposit into the Common Debt Service Reserve Account; the right to act as the sole holder of the Insured 2021 Bonds for the purpose of exercising any voting right or privilege or giving any consent or direction or taking any other action that the holders of the Insured 2021 Bonds are entitled to take pursuant to the Second Supplemental Indenture pertaining to (i) defaults and remedies and (ii) the duties and obligations of the Trustee; and the right to consent to the acceleration of the Insured 2021 Bonds. In addition, AGM shall, to the extent it makes any payment of principal of or interest on the Insured 2021 Bonds, become subrogated to the rights of the recipients of such payments in accordance with the terms of the Policy (which subrogation rights shall also include the rights of any such recipients in connection with any proceeding by or against the Authority under the United States Bankruptcy Code or any other applicable bankruptcy, insolvency, receivership, rehabilitation or similar law).

SECURITY FOR THE 2021 BONDS

The 2021 Bonds are limited obligations of the Authority. The principal of, interest on and premium, if any, on the 2021 Bonds are payable by the Authority only out of Net Revenues and from such other moneys as may be available under the Indenture for such purpose. Neither the general credit of the Authority nor the credit or taxing power of the County, the Commonwealth or any political subdivision thereof is pledged for the payment of the 2021 Bonds. The 2021 Bonds shall not be or be deemed a general obligation of the Authority or an obligation of the County, the Commonwealth or any political subdivision thereof. The Authority has no taxing power.

Pledge of Net Revenues and Other Pledged Revenues

Note that certain definitions used herein which were originally defined in the Master Indenture and set forth below are being amended by the Second Supplemental Indenture effective as of the date of issuance and delivery of the 2021 Bonds, as noted below. The definitions below utilize the definitions as amended by the Second Supplemental Indenture.

The 2021 Bonds are limited obligations of the Authority payable solely from and secured by a pledge of Net Revenues, certain funds and accounts held by the Trustee under the Indenture, and other amounts payable under the Indenture.

"Net Revenues" are defined in the Master Indenture to mean, for any given period, the Revenues for such period, less the Operation and Maintenance Expenses for such period.

"Revenues," in turn, are defined in the Master Indenture to include, except to the extent specifically excluded therefrom, all income, receipts, earnings and revenues received by or accrued to the Authority from the operation of the Airport System for a given period, as modified from time to time, including, but not limited to, (a) rates, tolls, fees, rentals (including ground rents from Special Facilities), charges and other payments made to or owed to the Authority for the use or availability of the Airport System, (b) amounts received or owed from the sale or provision of supplies, materials, goods and services provided by or made available by the Authority, including rental or business interruption insurance proceeds, received by, held by, accrued to or entitled to be received by the Authority or any successor thereto from the possession, management, charge, superintendence and control of the Airport System and its related facilities or activities and undertakings related thereto or from any other facilities wherever located with respect to which the Authority receives payments which are attributable to the Airport System or activities or undertakings related thereto, and (c) Other Pledged Revenues. Additionally, "Revenues" shall also include all income, receipts and earnings from the investment of amounts held in the Revenue Fund, any Debt Service Fund (except Capitalized Interest on deposit therein), the Debt Service Reserve Fund and any Common Debt Service Reserve Account or any Series Debt Service Reserve Account therein and such additional revenues, if any, as are designated as "Revenues" under the terms of any Supplemental Indenture.

The following, including any investment earnings thereon, are specifically excluded from Revenues:

(i) gifts, grants, reimbursements or payments received for the Airport System's benefit unless designated as and included in "Other Pledged Revenues"*;

(ii) any income otherwise included in this definition of "Revenues" which is restricted by its terms to purposes inconsistent with the payment of debt service on the Bonds;

(iii) Net Proceeds and other insurance proceeds, to the extent the use of such Net Proceeds or other proceeds is restricted by the terms of the policy under which they are paid to a use inconsistent with the payment of debt service on the Bonds (except to the extent Net Proceeds are utilized to pay Operation and Maintenance Expenses);

(iv) Special Facilities Revenues;

(v) Passenger Facility Charges (including PFCs Available for Debt Service);

(vi) the proceeds of the sale of Bonds or other obligations issued for Airport System purposes;

(vii) rents or other payments of any nature received now or in the future attributable to any ground leases, facility leases or other developments which are identified as the Pittsburgh International Airport Innovation Campus and/or Neighborhood 91 as well as moneys received that are pledged to the payment of any debt instrument that will generate new and/or enhanced revenues for the Authority;

(viii) any Swap Termination Payments paid to the Authority pursuant to a Qualified Swap;

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* Amended pursuant to the Second Supplemental Indenture.

(ix) investment income derived from any moneys or securities which may be placed in escrow or trust to defease Bonds;

(x) any arbitrage earnings which are required to be paid to the U.S. Government pursuant to Section 148 of the Code;

(xi) Capitalized Interest;

(xii) Customer Facility Charges, Gaming Revenues and Natural Gas Revenues unless designated as and included in "Other Pledged Revenues";

(xiii) Federal Direct Payments;

(xiv) excess Revenues from a prior Fiscal Year deposited in the Airport System Capital Fund;

(xv) any Released Revenues in respect of which the Authority has filed with the Trustee the request of the Authorized Authority Representative, a Consultant's or independent certified public accountant's certificate, opinion of Bond Counsel and the other documents contemplated in the definition of the term "Released Revenues";

(xvi) amounts on deposit in the Coverage Account*; and

(xvii) interest earnings or other investment earnings on any Construction Fund established by any Supplemental Indenture, which are specifically excluded from "Revenues," unless otherwise provided for in a Supplemental Indenture.

"Other Pledged Revenues" is defined in the Master Indenture to mean moneys, not constituting Revenues, that are designated, for any period, as "Other Pledged Revenues" pursuant to Section 4.18 of the Master Indenture. Other Pledged Revenues may include, but are not limited to, moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 of the Master Indenture, all or a portion of gift, grants**, CFCs, Gaming Revenues, and Natural Gas Revenues; however, PFCs Available for Debt Service may not be designated as or constitute "Other Pledged Revenues."

"Operation and Maintenance Expenses" or "O&M Expenses" are defined in the Master Indenture to mean, for any given period, the reasonable and necessary costs paid by the Authority for maintaining and operating the Airport System as determined in accordance with Generally Accepted Accounting Principles as in effect from time to time; including any costs of Credit Facilities and Liquidity Facilities; but excluding depreciation expense, any principal or interest payment in respect of capital leases or indebtedness, including the Bonds, any costs of issuance relating to any capital leases or indebtedness including the Bonds, amortization or intangibles, any non-cash pension and other post-employment benefits (OPEB) obligations or liabilities (except to the extent required to be cash funded by the Commonwealth or the County), any Swap Termination Payments, and any operation and maintenance expenses of the Airport System payable from moneys other than Revenues (including, but not limited to, any non-cash items that are required to be treated as operation and maintenance expenses of the Airport System in accordance with Generally Accepted Accounting Principles). Operation and Maintenance Expenses shall not include any operation and maintenance costs and expenses pertaining to Special Facilities or expenses incurred by any lessee under a Special Facility Agreement.

"Passenger Facility Charges" or "PFCs" shall mean charges collected by the Authority pursuant to the authority granted by the Aviation Safety and Capacity Expansion Act of 1990 (49 U.S.C. Section 40117), and 14 CFR Part 158, as

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* Amended pursuant to the Second Supplemental Indenture.

** As described under "AMENDMENTS TO THE MASTER INDENTURE" the Second Supplemental Indenture provides for certain amendments to the Master Indenture, which will become effective upon the consent of not less than 51% in the aggregate of Bondholders. By acceptance of a confirmation of purchase of the 2021 Bonds, each holder of 2021 Bonds will be deemed to have consented to the amendments to the Master Indenture. Upon the issuance of the 2021 Bonds, 100% of Bondholders will have consented to the amendments to the Master Indenture, and as such the above language reflects the anticipated amendments to the Master Indenture upon the anticipated closing date for the 2021 Bonds.

amended from time to time, in respect of any component of the Airport System and interest earnings thereon, net of amounts that collecting air carriers are entitled to retain for collecting, handling and remitting such passenger facility charge revenues.

"PFCs Available for Debt Service" shall mean Passenger Facility Charges made available to pay debt service on one or more Series of Bonds during any period pursuant to Section 4.17 of the Master Indenture.

As discussed above, PFCs are specifically excluded from Other Pledged Revenues, but may be designated by the Authority as PFCs Available for Debt Service and applied to pay principal of, premium, if any, and interest on Bonds as described below.

None of the properties of the Airport System are subject to any mortgage or other lien for the benefit of the owners of the 2021 Bonds or other obligations issued or to be issued under the Master Indenture, and neither the full faith and credit of the Authority, the Commonwealth or any political subdivision or agency of the Commonwealth, nor the taxing power of the Commonwealth or any political subdivision or agency of the Commonwealth is pledged to the payment of the principal of or interest on the 2021 Bonds. The Authority has no taxing power.

Flow of Funds

The Authority has established, holds and maintains a special fund designated as the Revenue Fund into which all Revenues are deposited. Pursuant to the Master Indenture, the Authority will agree to continue to hold and maintain the Revenue Fund. As long as there are any Outstanding Bonds, all Revenues, when and as received, will be deposited by the Authority in the Revenue Fund and will be set aside for the payment of the following amounts or deposited or transferred to the following funds, accounts and subaccounts in the following order of priority:

First: to the Operation and Maintenance Fund. On or prior to the tenth (10th) Business Day of each month, the Authority shall deposit Revenues to the Operation and Maintenance Fund in an amount projected to be required to pay Operation and Maintenance Expenses for that month as set forth in the budget of the Authority for such Fiscal Year as finally approved by the Authority. In the event that the balance in the Operation and Maintenance Fund at any time is insufficient to make any required payments therefrom due and payable, additional Revenues at least sufficient to make such payments shall immediately be transferred to the Operation and Maintenance Fund from the Revenue Fund or Operation and Maintenance Reserve Account.

Second: to the Debt Service Funds. Except as otherwise provided in a Supplemental Indenture, on or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred by the Authority, without priority and on an equal basis, except as to timing of payment, to the Trustee for deposit to the Debt Service Funds in the amounts, at the times and in the manner provided in the Master Indenture to provide for the payment of principal and interest to become due on the Outstanding Bonds. In addition to the deposit of Revenues to the Debt Service Funds, the Authority shall deposit any applicable PFCs Available for Debt Service with the Trustee for deposit to the applicable Debt Service Fund(s) in accordance with the provisions of the applicable Supplemental Indenture and/or the applicable certificate as provided in the Master Indenture.

Third: to the Debt Service Reserve Fund. On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred by the Authority, without priority and on an equal basis, to the Trustee for deposit to the Debt Service Reserve Fund at the times and in the amounts provided in the Master Indenture, and immediately thereafter transferred to the Common Debt Service Reserve Account and/or any Series Debt Service Reserve Account, as applicable, at the times and in the amounts set forth in any Supplemental Indenture. See "— Debt Service Reserve Fund" below.

Fourth: to the Subordinate Obligation Debt Service Funds. On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred by the Authority to the Trustee, in such amounts and at such times (as specified by the Authority), as shall be necessary to make all payments and deposits required to be made during the following month on all Subordinate Obligations.

Fifth: to the Subordinate Obligation Debt Service Reserve Funds. On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred or caused to be transferred by the Authority to the Trustee (in such amounts and at such times as specified in the Supplemental Indenture or other written instrument authorizing the issuance of any Subordinate Obligations) to fund any deficiency in any debt service reserve fund established by or for the benefit of the Authority in connection with any Subordinate Obligations issued, provided, however, no Revenues shall be transferred by the Authority to the Trustee for deposit to any debt service reserve fund established by or for the benefit of the Authority in connection with any Subordinate Obligations if amounts (including any Debt Service Reserve Fund Surety Policy) in the Common Debt Service Reserve Account are not sufficient to meet the Reserve Requirement for such Common Debt Service Reserve Account or amounts (including any Debt Service Reserve Fund Surety Policy) in any Series Debt Service Reserve Account are not sufficient to meet the applicable Reserve Requirement for such Series Debt Service Reserve Account.

Sixth: to the Operation and Maintenance Reserve Account. On or prior to the tenth (10th) Business Day of each month, sufficient Revenues shall be deposited to the Operation and Maintenance Reserve Account to fund any deficiency in the Operation and Maintenance Reserve Account in accordance with the Master Indenture.

Seventh: to the Renewal and Replacement Fund. On or prior to the tenth (10th) Business Day of each month, sufficient Revenues shall be deposited to the Renewal and Replacement Fund to fund any deficiency in the Renewal and Replacement Fund in accordance with the Master Indenture.

Eighth: to the Equipment and Capital Outlay Fund. On or prior to the tenth (10th) Business Day of each month, at the discretion of the Authority, Revenues may be deposited to the Equipment and Capital Outlay Fund in an amount determined by the Authority to fund the Equipment and Capital Outlay Fund in accordance with the Master Indenture.

Ninth: to the Coverage Account. On or prior to the tenth (10th) Business Day of each month, at the discretion of the Authority, Revenues may be deposited to the Coverage Account in an amount determined by the Authority to fund the Coverage Account in accordance with the Master Indenture.

Tenth: to the Rate Stabilization Fund. On or prior to the tenth (10th) Business Day of each month, at the discretion of the Authority, Revenues may be deposited to the Rate Stabilization Fund in an amount determined by the Authority to fund the Rate Stabilization Fund in accordance with the Master Indenture. Note, however, that based on the terms of the current Airline Operating Agreements, the Authority does not expect to fund the Rate Stabilization Fund during the current term of the Airline Operating Agreements. See "AGREEMENTS WITH THE AIRLINES."

Eleventh: to the Airport System Capital Fund. After all deposits and payments have been made as described in clauses First through Seventh above, the Authority, may from time to time, at its discretion, deposit all or a portion of the remaining Revenues in the Revenue Fund to the Airport System Capital Fund and apply such Revenues to the purposes set forth in Section 4.12 of the Master Indenture

The Authority reserves the right to amend, without Bondholder consent, the application of the funds as provided in clause Sixth through Eleventh above and to create additional funds and accounts to be inserted below Clause Fifth above. The Authority covenants that no such modifications will violate the provisions and order of payment set forth in Clauses First through Fifth above or the provisions of any other contracts or agreements of the Authority or any legal requirements otherwise applicable to the use of such moneys.

The following chart provides a graphic presentation of the flow of funds under the Master Indenture upon the receipt of Revenues.

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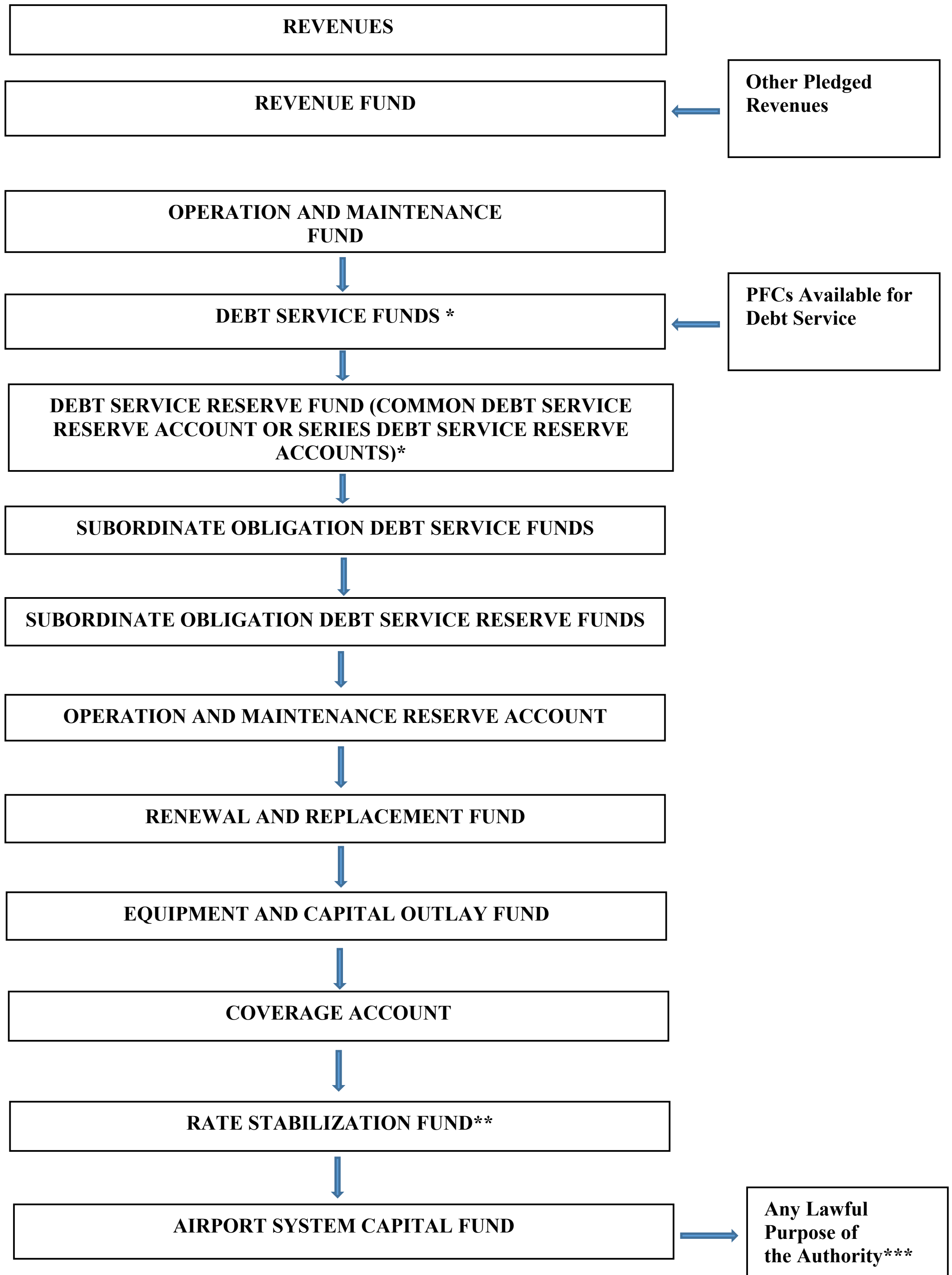
Flow of Funds Pursuant to Master Indenture



* Held and maintained by the Trustee.

** The Authority does not expect to fund the Rate Stabilization Fund during the current term of the Airline Operating Agreements.

*** Amounts in the Airport System Capital Fund may be used for any lawful purpose of the Authority, including, at the election of the Authority, redeposit of such amounts into the Revenue Fund.

Rate Covenant

(a) Pursuant to the Master Indenture, while any of the Bonds remain Outstanding, the Authority covenants to establish, fix, prescribe and collect rates, tolls, fees, rentals and charges in connection with the Airport System and for services rendered in connection therewith, so that Net Revenues in each Fiscal Year will be at least equal to the following amounts:

> (i) the Annual Debt Service on any Outstanding Bonds required to be funded by the Authority in such Fiscal Year as required by the Master Indenture or any Supplemental Indenture with respect to the Outstanding Bonds as reduced by the amount of principal and/or interest paid with Capitalized Interest and PFCs Available for Debt Service, if any;
>
> (ii) the required deposits to the Common Debt Service Reserve Account or any Series Debt Service Reserve Account which may be established by a Supplemental Indenture;
>
> (iii) the reimbursement owed to any Credit Provider or Liquidity Provider as required by a Supplemental Indenture;
>
> (v) the interest on and principal of any indebtedness of the Authority with respect to the Airport System required to be funded during such Fiscal Year, other than for Outstanding Bonds, but including Subordinate Obligations; and
>
> (v) funding of any debt service reserve funds created in connection with any indebtedness of the Authority with respect to the Airport System, other than Outstanding Bonds, but including Subordinate Obligations.

(b) Separately, in addition to the covenants set forth in subparagraph (a) above, the Authority further covenants and agrees in the Master Indenture that it shall establish, fix, prescribe and collect rates, tolls, fees, rentals and charges in connection with the Airport System and for services rendered in connection therewith, so that during each Fiscal Year the Net Revenues, together with any amounts available in the Coverage Account, will be equal to at least (i) 125% of Annual Debt Service on the Outstanding Bonds for such Fiscal Year and (ii) 100% of the annual debt service with respect to all outstanding Subordinate Obligations. For purposes of this paragraph (b), the amount of any transfer from the Coverage Account taken into account cannot exceed the Coverage Amount.

For purposes of paragraphs (a) and (b) above, Annual Debt Service on the Outstanding Bonds will be reduced by the amount of principal and/or interest paid with Capitalized Interest and PFCs Available for Debt Service, if any, and the term "Coverage Amount" means the amount which may, in the Authority's discretion, be deposited in the Coverage Account in order for the Authority to have on deposit therein with respect to any Annual Debt Service due and payable in the current Fiscal Year on Outstanding Bonds, an amount not to exceed twenty-five percent (25%) of such Annual Debt Service. See "APPENDIX C – FORM OF MASTER INDENTURE – Section 4.17, PFCs Available for Debt Service."

If, upon the receipt of the audited financial statements for a Fiscal Year, the Net Revenues, together with any amounts available in the Coverage Account, in such Fiscal Year are less than the amounts specified in paragraphs (a) and (b) above, the Authority will retain and direct a Consultant to make recommendations as to the revision of the Authority's business operations and its schedule of rates, tolls, fees, rentals and charges for the use of the Airport System and for services rendered by the Authority in connection with the Airport System, and after receiving such recommendations or giving reasonable opportunity for such recommendations to be made, the Authority will take all lawful measures to revise the schedule of rates, tolls, fees, rentals and charges as may be necessary to produce Net Revenues, together with any amounts available in the Coverage Account, in the amounts specified in paragraphs (a) and (b) above in the next succeeding Fiscal Year.

In the event that Net Revenues, together with any amounts available in the Coverage Account, for any Fiscal Year are less than the amounts specified in paragraphs (a) or (b) above, but the Authority has, prior to or during the next succeeding Fiscal Year, promptly taken all lawful measures to revise the schedule of rates, tolls, fees, rentals and charges as required by the provisions set forth in the prior paragraph, such deficiency in Net Revenues, together with any amounts available in the Coverage Account, will not constitute an Event of Default under the Master Indenture. Nevertheless, if after taking the measures required by the provisions set forth in the prior paragraph to revise the schedule of rates, tolls, fees, rentals and charges, Net Revenues, together with any amounts available in the Coverage Account, in the next succeeding Fiscal Year (as evidenced by the audited financial statements of the Authority for such Fiscal Year) are less than the amounts specified in paragraphs (a) or (b) above, such deficiency in Net Revenues, together with any amounts available in the Coverage Account, will constitute an Event of Default under the Master Indenture.

Debt Service Reserve Fund

Pursuant to the Master Indenture, the Authority will establish the Debt Service Reserve Fund, which Debt Service Reserve Fund shall be held and maintained by the Trustee or any agent of the Trustee. The Debt Service Fund may contain a Common Debt Service Reserve Account and one or more Series Debt Service Reserve Accounts. The Common Debt Service Reserve Account shall secure each Series of Bonds that the Authority elects, pursuant to a Supplemental Indenture, to have participate in the Common Debt Service Reserve Account. The Authority reserves the right, in its discretion, (i) to allow any Series of Bonds to participate in the Common Debt Service Reserve Account, or (ii) to create, pursuant to Supplemental Indentures, separate Series Debt Service Reserve Accounts and allow one or more Series of Bonds to participate in such Series Debt Service Reserve Accounts, or (iii) to provide that a Series of Bonds not participate in the Common Debt Service Reserve Account or any Series Debt Service Reserve Account. Any Series Debt Service Reserve Account established under a Supplemental Indenture shall be funded in an amount equal to the applicable Reserve Requirement set forth in such Supplemental Indenture. Additionally, such Supplemental Indenture shall provide for the manner of funding and replenishing of such Series Debt Service Reserve Account and establish such other terms with respect to such Series Debt Service Reserve Account as the Authority may deem to be appropriate, including providing a Debt Service Reserve Fund Surety Policy in lieu thereof. At the time of issuance of the 2021 Bonds, the Authority will elect to have the 2021 Bonds participate in the Common Debt Service Reserve Account. The 2021 Bonds and any Additional Bonds the Authority elects to have participate in the Common Debt Service Reserve Account are collectively referred to in this Official Statement as the "Common Debt Service Reserve Account Participating Bonds."

Moneys held in the Common Debt Service Reserve Account will be used for the purpose of paying principal of and interest on the Common Debt Service Reserve Account Participating Bonds on a *pari passu* basis. If, on any Payment Date for the Common Debt Service Reserve Account Participating Bonds, the amounts in the Debt Service Funds for such Bonds are insufficient to pay in full the amount then due on such Bonds, moneys held in the Common Debt Service Reserve Account will be used for the payment of the principal of and/or interest thereon. If amounts in the Common Debt Service Reserve Account consist of both cash and one or more Debt Service Reserve Fund Surety Policies, the Trustee will make any required payments of amounts in the Common Debt Service Reserve Account first from any cash on deposit in the Common Debt Service Reserve Account prior to making a draw upon any Debt Service Reserve Fund Surety Policy. Moneys held in the Common Debt Service Reserve Account also may be used to make any deposit required to be made to the Rebate Fund created for the Common Debt Service Reserve Account Participating Bonds at the written direction of the Authority if the Authority does not have other funds available from which such deposit can be made.

The Common Debt Service Reserve Account is required to be funded at all times in an amount equal to the Reserve Requirement. The "Reserve Requirement" equals, with respect to the Common Debt Service Reserve Account, except as otherwise set forth in a Supplemental Indenture, an amount equal to the lesser of (a) as of the date of each calculation, the Maximum Aggregate Annual Debt Service For Reserve Requirement for all Outstanding Bonds participating in the Common Debt Service Reserve Account, (b) 10% of the original principal amount of all Outstanding Bonds participating in the Common Debt Service Reserve Account, less the amount of original issue discount with respect to such Bonds if such original issue discount exceeded 2% of such Bonds at the time of their original issuance, and (c) as of the date of each calculation, 125% of the average Aggregate Annual Debt Service For Reserve Requirement for all Outstanding Bonds participating in the Common Debt Service Reserve Account. The Reserve Requirement with respect to any Series Debt Service Reserve Account shall be set forth in the Supplemental Indenture establishing such Series Debt Service Reserve Account. At the time of issuance of any Additional Bonds which the Authority elects to have participate in the Common Debt Service Reserve Account, the Reserve Requirement is required to be met. The Authority may fund all or a portion of the Reserve Requirement with a Debt Service Reserve Fund Surety Policy. See "APPENDIX C – FORM OF MASTER INDENTURE - Section 4.06, Debt Service Reserve Fund." At the time of issuance of the 2021 Bonds, a portion of the proceeds of the 2021 Bonds in the amount of $50,606,850 will be deposited to the Common Debt Service Reserve Account to meet the Reserve Requirement.

Additional Bonds

The Master Indenture provides the Authority with flexibility as to establishing the nature and terms of any Additional Bonds hereafter issued with a lien and charge on Net Revenues on parity with the 2021 Bonds. For example, the Master Indenture provides for the issuance of Variable Rate Indebtedness, Capital Appreciation Bonds and Balloon Indebtedness on a parity with the 2021 Bonds. See "APPENDIX C – FORM OF MASTER INDENTURE – Section 2.11, Additional Bonds Test." Additional Bonds may be issued under the Master Indenture on a parity with the 2021 Bonds provided, among other things, that there is delivered to the Trustee either:

(a) a certificate, dated as of a date between the date of pricing of the Bonds being issued and the date of delivery of such Bonds (both dates inclusive), prepared by an Authorized Authority Representative showing that the Net Revenues for the last audited Fiscal Year or for any 12 consecutive months out of the most recent 18 consecutive months immediately preceding the date of issuance of the proposed Series of Bonds, together with any funds available in the Coverage Account, were at least equal to (i) 125% of Maximum Aggregate Annual Debt Service with respect to all Outstanding Bonds and the proposed Series of Bonds, calculated as if the proposed Series of Bonds were then Outstanding, and (ii) 100% of the maximum aggregate Annual Debt Service for all outstanding Subordinate Obligations; or

(b) a certificate, dated as of a date between the date of pricing of the Bonds being issued and the date of delivery of such Bonds (both dates inclusive), prepared by a Consultant, with national recognition as experts in the area of air traffic and airport financial analysis, showing that:

(i) the Net Revenues for the last audited Fiscal Year or for any 12 consecutive months out of the most recent 18 consecutive months immediately preceding the date of issuance of the proposed Series of Bonds, together with any funds available in the Coverage Account for the same time period, were at least equal to (A) 125% of the sum of the Annual Debt Service due and payable with respect to all Outstanding Bonds, and (B) 100% of the Annual Debt Service for all outstanding Subordinate Obligations for such applicable periods; and

(ii) for the period from and including the first full Fiscal Year following the issuance of such proposed Series of Bonds during which no interest on such Series of Bonds is expected to be paid from the proceeds thereof through and including the later of: (A) the fifth full Fiscal Year following the issuance of such Series of Bonds, or (B) the third full Fiscal Year during which no interest on such Series of Bonds is expected to be paid from the proceeds thereof, the estimated Net Revenues, together with amounts projected to be available in the Coverage Account and any other legally available funds that the Authority expects to use to pay debt service on the Bonds that are in addition to Other Pledged Revenues, for each such Fiscal Year, will be at least equal to (1) 125% of the Aggregate Annual Debt Service for each such Fiscal Year with respect to all Outstanding Bonds and calculated as if (y) the proposed Series of Bonds were then Outstanding, and (z) any future Series of Bonds which the Authority estimates will be required to complete payment of the estimated costs of construction of the uncompleted portions of the Airport Facilities and (2) 100% of the Annual Debt Service for all outstanding Subordinate Obligations for such Fiscal Year.

The components of Aggregate Annual Debt Service are to be calculated as provided in the Master Indenture. See "APPENDIX C – FORM OF MASTER INDENTURE – Section 2.11, Additional Bonds Test."

For purposes of subsection (b)(ii) above, in estimating Net Revenues, the Consultant may take into account (1) Revenues from other Airport Facilities reasonably expected to become available during the period for which the estimates are provided, and (2) any increase in fees, rates, charges, rentals or other sources of Revenues which the Consultant believes to be a reasonable assumption for such period. With respect to Operation and Maintenance Expenses, the Consultant will use such assumptions as the Consultant believes to be reasonable, taking into account: (x) historical Operation and Maintenance Expenses, (y) Operation and Maintenance Expenses associated with any other new Airport Facilities, and (z) such other factors, including inflation and changing operations or policies of the Authority, as the Consultant believes to be appropriate. The Consultant will include in the certificate or in a separate accompanying report the calculations and assumptions made in determining the estimated Net Revenues and will also set forth the calculations of Aggregate Annual Debt Service, which calculations may be based upon information provided by another Consultant.

For purposes of preparing the certificate or certificates described above, the Consultant or the Authorized Authority Representative may rely upon financial information provided by the Authority.

Neither of the certificates described above under subsection (a) above will be required if:

(i) the Bonds being issued are for the purpose of refunding then Outstanding Bonds and there is delivered to the Trustee, instead, a certificate of an Authorized Authority Representative or a Consultant showing that Maximum Aggregate Annual Debt Service after the issuance of such Refunding Bonds will not exceed the Maximum Aggregate Annual Debt Service prior to the issuance of such Refunding Bonds; or

(ii) the Bonds being issued constitute Notes and there is delivered to the Trustee, instead, a certificate prepared by an Authorized Authority Representative or a Consultant showing that the principal amount of the proposed Notes being issued, together with the principal amount of any Notes then Outstanding, does not exceed 10% of the Net Revenues for any 12 consecutive months out of the most recent 24 months immediately preceding the issuance of the proposed Notes, accompanied by a certificate of an Authorized Authority Representative or a Consultant setting forth calculations showing that for each of the Fiscal Years during which the Notes will be Outstanding, and taking into account the debt service becoming due on such Notes, the Authority will be in compliance with the rate covenant set forth in Section 5.04 of the Master Indenture and described above under the caption "—Rate Covenant"; or

(iii) the Bonds being issued are Completion Bonds and the following written certificates are delivered to the Trustee: (A) a Consultant's certificate stating that the nature and purpose of such Project has not materially changed and (B) a certificate of an Authorized Authority Representative to the effect that (1) all of the proceeds (including investment earnings on amounts in the Construction Fund established for the Project) of the original Bonds issued to finance such Project have been or will be used to pay Costs of the Project, (2) the then estimated Costs of the Project exceed the sum of the Costs of the Project already paid plus moneys available in the Construction Fund established for the Project (including unspent proceeds of Bonds previously issued for such purpose), and (3) the proceeds to be received from the issuance of such Completion Bonds plus moneys available in the Construction Fund established for the Project (including unspent proceeds of the Bonds previously issued for such purpose) will be sufficient to pay the remaining estimated Costs of the Project. "Completion Bonds" are defined in the Master Indenture as Bonds issued to pay costs of completing a Project for which Bonds have previously been issued and the principal amount of such Bonds being issued for completion purposes does not exceed an amount equal to 15% of the principal amount of the Bonds originally issued for the Project.

The Authority expects to issue Additional Bonds in the future to complete funding of the TMP, the Airside Terminal Renovations and the Airline Fit-Outs and finance the future development of the Airport System. See "THE TERMINAL MODERNIZATION PROGRAM – Funding Sources."

Issuance of Subordinate Obligations

In addition to the Subordinate Series 2019 Notes securing the PNC Line of Credit, the Authority may, from time to time, incur indebtedness which is subordinate to the Bonds and which indebtedness is, in the Master Indenture, referred to as Subordinate Obligations. Such indebtedness shall be incurred at such times and upon such terms as the Authority shall determine, provided that:

(a) any Supplemental Indenture or other written instrument authorizing the issuance of any Subordinate Obligations shall specifically state that such lien on or security interest granted in the Revenues and the Net Revenues is junior and subordinate to the lien on and security interest in such Revenues and Net Revenues and other assets granted to secure the Bonds; and

(b) Payment of principal of and interest on such Subordinate Obligations shall be permitted, provided that all deposits required to be made pursuant to clauses First through Third above under "Flow of Funds" (Section 4.03(b)(i) through (iii) of the Master Indenture), if any, are then current in accordance with Section 4.03(b) of the Master Indenture.

OUTSTANDING DEBT OF THE AUTHORITY

Long Term Debt

As of December 1, 2019, long term debt of the Authority issued under the Authority's 1999 trust indenture (the "Prior Indenture") was outstanding in the aggregate principal amount of $70,880,000. However, on December 18, 2019, the Authority defeased all such long-term debt with available cash in compliance with the Prior Indenture, as verified by an independent certified public accountant engaged by the Authority as required by the Prior Indenture. As a result, following issuance of the 2021 Bonds, the 2021 Bonds will represent the only outstanding long-term senior debt of the Authority secured by Net Revenues.

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Debt Service Schedule

The following table shows the debt service payable on the 2021 Bonds.

	Series 2021A			Series 2021B			Total
Period Ending 1/1	Principal	Interest	Total	Principal	Interest	Total	Total Debt Service
2022	--	$11,371,181	$11,371,181	--	$1,837,882	$1,837,882	$13,209,063
2023	--	32,749,000	32,749,000	--	5,293,100	5,293,100	38,042,100
2024	--	32,749,000	32,749,000	--	5,293,100	5,293,100	38,042,100
2025	--	32,749,000	32,749,000	--	5,293,100	5,293,100	38,042,100
2026	$10,865,000	32,749,000	43,614,000	$1,695,000	5,293,100	6,988,100	50,602,100
2027	11,410,000	32,205,750	43,615,750	1,780,000	5,208,350	6,988,350	50,604,100
2028	11,980,000	31,635,250	43,615,250	1,870,000	5,119,350	6,989,350	50,604,600
2029	12,580,000	31,036,250	43,616,250	1,960,000	5,025,850	6,985,850	50,602,100
2030	13,210,000	30,407,250	43,617,250	2,060,000	4,927,850	6,987,850	50,605,100
2031	13,870,000	29,746,750	43,616,750	2,160,000	4,824,850	6,984,850	50,601,600
2032	14,560,000	29,053,250	43,613,250	2,270,000	4,716,850	6,986,850	50,600,100
2033	15,290,000	28,325,250	43,615,250	2,385,000	4,603,350	6,988,350	50,603,600
2034	16,055,000	27,560,750	43,615,750	2,505,000	4,484,100	6,989,100	50,604,850
2035	16,860,000	26,758,000	43,618,000	2,630,000	4,358,850	6,988,850	50,606,850
2036	17,700,000	25,915,000	43,615,000	2,760,000	4,227,350	6,987,350	50,602,350
2037	18,530,000	25,087,000	43,617,000	2,895,000	4,089,350	6,984,350	50,601,350
2038	19,270,000	24,345,800	43,615,800	3,015,000	3,973,550	6,988,550	50,604,350
2039	20,040,000	23,575,000	43,615,000	3,135,000	3,852,950	6,987,950	50,602,950
2040	20,840,000	22,773,400	43,613,400	3,260,000	3,727,550	6,987,550	50,600,950
2041	21,675,000	21,939,800	43,614,800	3,390,000	3,597,150	6,987,150	50,601,950
2042	22,545,000	21,072,800	43,617,800	3,525,000	3,461,550	6,986,550	50,604,350
2043	23,445,000	20,171,000	43,616,000	3,665,000	3,320,550	6,985,550	50,601,550
2044	24,380,000	19,233,200	43,613,200	3,815,000	3,173,950	6,988,950	50,602,150
2045	25,355,000	18,258,000	43,613,000	3,965,000	3,021,350	6,986,350	50,599,350
2046	26,370,000	17,243,800	43,613,800	4,125,000	2,862,750	6,987,750	50,601,550
2047	27,425,000	16,189,000	43,614,000	4,290,000	2,697,750	6,987,750	50,601,750
2048	28,795,000	14,817,750	43,612,750	4,505,000	2,483,250	6,988,250	50,601,000
2049	30,235,000	13,378,000	43,613,000	4,730,000	2,258,000	6,988,000	50,601,000
2050	31,750,000	11,866,250	43,616,250	4,965,000	2,021,500	6,986,500	50,602,750
2051	33,335,000	10,278,750	43,613,750	5,215,000	1,773,250	6,988,250	50,602,000
2052	35,005,000	8,612,000	43,617,000	5,475,000	1,512,500	6,987,500	50,604,500
2053	36,575,000	7,037,650	43,612,650	5,750,000	1,238,750	6,988,750	50,601,400
2054	38,220,000	5,392,650	43,612,650	6,035,000	951,250	6,986,250	50,598,900
2055	39,940,000	3,673,650	43,613,650	6,335,000	649,500	6,984,500	50,598,150
2056	41,740,000	1,877,300	43,617,300	6,655,000	332,750	6,987,750	50,605,050
Total	**$719,850,000**	**$741,833,481**	**$1,461,683,481**	**$112,820,000**	**$121,506,232**	**$234,326,232**	**$1,696,009,713**

Note: Interest on the 2021 Bonds will be capitalized through February 1, 2025.

Future Long Term Debt

In addition to the 2021 Bonds, the Authority anticipates that it will issue approximately $487,000,000 in principal amount of Additional Bonds under the Master Indenture by 2024 to complete the funding of the TMP, Airside Terminal Renovations and Airline Fit-Outs. The amount of Additional Bonds to be issued will depend in part on the availability of other revenue sources such as PFC revenues, CFC revenues, Gaming Revenues, Natural Gas Revenues and grants to pay the remaining costs of such projects. Also, if the Authority obtains a TIFIA loan for the TMP in the future, such loan would reduce the amount of Additional Bonds that would be required.

Subordinate Obligations

The Master Indenture permits the Authority to issue other Subordinate Obligations secured by liens on the Authority's Revenues that are subordinate to the liens provided to holders of the Authority's other Bonds, including the 2021 Bonds. Such Subordinate Obligations would be payable from amounts remaining after the deposits to the Funds, Accounts and Subaccounts set forth in Section 4.03(b)(i) through (iii) of the Master Indenture.

Pursuant to a Loan Agreement dated December 18, 2019, as amended, with PNC Bank (the "PNC Loan Agreement"), PNC Bank provided a revolving line of credit to the Authority in the maximum principal amount of $200,000,000, which principal amount was reduced to $100,000,000 on December 1, 2020 and subsequently increased to $150,000,000 effective December 30, 2020 (the "PNC Line of Credit"). Proceeds of the PNC Line of Credit have been and will be used to provide funding for costs of the TMP. The PNC Line of Credit is secured by subordinated notes (the "Subordinated Series 2019 Notes") issued by the Authority to PNC Bank under the Master Indenture, which are Subordinate Obligations under the Master Indenture and secured by subordinate liens on the Net Revenues pursuant to a First Supplemental Trust Indenture dated as of December 1, 2019 (as amended, the "First Supplemental Indenture"). As of the date hereof, approximately $86,700,000 in principal amount is outstanding under the PNC Line of Credit. A portion of the proceeds of the 2021 Bonds will be applied to the repayment of all or a portion of the outstanding balance of the PNC Line of Credit as of the date of issuance and delivery of the 2021 Bonds. Thereafter, the PNC Line of Credit will remain available to the Authority to finance costs of the TMP and for any other available legal use. The PNC Line of Credit matures on December 22, 2022, unless otherwise extended pursuant to the terms of the PNC Loan Agreement.

Other Debt

The Authority has outstanding, as of May 1, 2021, a total of $6,000,000 in indebtedness that is not secured by the pledge of Net Revenues under the Master Indenture. Such indebtedness represents a $6,000,000 loan (the "CFA Loan") to the Authority from the Commonwealth Finance Authority ("CFA") on June 20, 2020 under its Business in Our Sites (BIOS) loan program. The proceeds of the CFA Loan are to be used for the development of infrastructure and related improvements for the approximately 195 acre site known as Neighborhood 91 industrial park located at the Airport (the "Premises"). The CFA Loan is secured only by an Assignment of Rents and Leases (the "Assignment") derived from tenants of the Premises, which revenues are not included within the Revenues pledged under the Master Indenture. Other than the Assignment, there are no liens or encumbrances on the Premises. The Authority plans to request an additional $3,000,000 BIOS loan from CFA for additional infrastructure improvements relating to Neighborhood 91.

THE AUTHORITY

The Authority is a public body, corporate and politic, duly organized and existing under the laws of the Commonwealth. The 2021 Bonds are authorized and being issued by the Authority pursuant to the provisions of the Constitution and statutes of the Commonwealth, particularly the Act. Resolutions authorizing the issuance of the 2021 Bonds have been adopted by the Board of the Authority.

The Authority was created by the County on June 17, 1999 as a body corporate and politic under the Act. The Airport is owned by the County and is operated by the Authority pursuant to the Transfer Agreement, which extends to September 16, 2024 with two 25-year extension options exercisable at the option of the Authority. In connection with the transfer, the Authority assumed the obligations of the County for airport revenue bonds previously issued by the County to finance construction and development of the Airport System. The Authority intends to exercise its option to extend the term of the Transfer Agreement for an additional 25-year renewal term through September 16, 2049. There are no preconditions to the Authority's exercise of its options to extend other than providing notice within the last year of the applicable term to the County of its exercise. No action is required by the County or any third party.

The Authority's original Articles of Incorporation provided that the term of existence of the Authority extends to July 14, 2049. The Act provides that municipality authorities created under the Act have a life of 50 years. The term of existence may be extended, by not more than 50 years for each extension, upon the adoption of a resolution by the authority and then submitting the resolution to the municipality creating the authority for approval in accordance with the applicable provisions of the municipality's governing code. In June 2021, the Authority's Articles of Incorporation were amended to extend the life of the Authority through June 17, 2059.

The present officers and board members of the Authority and their respective principal occupations and terms of office are as follows:

Name and Title	Occupation	Term Expires (Dec. 31)
David W. Minnotte, Chairman	President/CEO, Minnotte Manufacturing	2023
Hon. Matthew Smith, Vice Chairman	President of Greater Pittsburgh Chamber of Commerce	2024
Ashley Henry Shook, Secretary	Principal, Mulberry Public Affairs LLC	2021
Jan Rea, Treasurer	Community Volunteer	2021
Lance Chimka	Director, Allegheny County Department of Economic Development	2023
Reverend Dr. William H. Curtis	Pastor, Mt. Ararat Baptist Church	2021
Cynthia D. Shapira	Community Volunteer	2025
Richard Stanizzo	Business Manager, Pittsburgh Building and Construction Trades Council (Retired)	2025
Hon. Randy Vulakovich	State Senator (Retired)	2025

Board members are appointed by the County Executive of the County, subject to confirmation by a majority of the County Council.

Management of the Authority

The Authority's Chief Executive Officer, Christina A. Cassotis, is responsible for the operation of the Authority, which manages the Airport and the Allegheny County Airport. The Authority currently employs 370 full-time personnel at the Airport and 9 full-time personnel at the Allegheny County Airport. In addition, nearly 82 Allegheny County Police (officers and supervisors) are currently assigned to the Airport System on a full-time basis.

Airport Systems operations are conducted under the supervision of the following members of the Authority staff:

Christina A. Cassotis, Chief Executive Officer. Ms. Cassotis joined the Authority as Chief Executive Officer in 2015. She is responsible for the strategic vision and overall leadership of the Authority. In her six years as CEO, she has led a significant turnaround at the Airport with an 80% increase in the number of nonstop destinations, three straight years of passenger growth, and the announcement of the plan to undertake the TMP.

Ms. Cassotis began her career in commercial aviation working for the Massachusetts Port Authority, which operates Boston Logan International Airport. Ms. Cassotis also worked for 15 years at the aviation consulting firm of ICF-SH&E, where she served as Managing Officer for Airport Services. There she led a global team of aviation consultants which advised numerous domestic and international airports on issues related to air service development and competitiveness.

She is a frequent speaker at national and international aviation events. Ms. Cassotis holds an MBA from the MIT Sloan School of Management and a BA from the University of Massachusetts.

Eric Sprys, Executive Vice President and Chief Financial Officer. Mr. Sprys is responsible for the overall management and direction of the Authority's financial operations, including day-to-day responsibility for planning, implementing, managing, and controlling all finance-related activities. He provides oversight for accounting, finance, budget and forecasting, strategic planning, capital program control, purchasing and contracting, audit program integrity, and financial policy. Mr. Sprys is also responsible for overseeing real estate development, business development, air service development, and legal services for the Airport System. He collaborates with airlines, airport tenants and community partners to promote the Authority's mission of driving innovation and regional growth. Mr. Sprys assumed the role of Chief Financial Officer in the summer of 2020. Prior to becoming Chief Financial Officer, from 2017 to 2020 he served as Chief Commercial Officer of the Authority.

Prior to joining the Authority in 2017, Mr. Sprys served as the Chief Financial Officer and Senior Vice President of Finance for Kadmon Pharmaceuticals and as Chief Financial Officer of A. Stucki Company. Mr. Sprys received his BA in secondary mathematics education from Pennsylvania State University and his MBA from Duquesne University. He is also a certified public accountant.

Paul Hoback, Chief Development Officer. Mr. Hoback is responsible for the overall management and direction of the engineering, planning, and environmental departments for the Airport and the Airport System. Additionally, he oversees the TMP, including program management, contracts for construction and construction management, and is ultimately responsible for the on-time, on-scope and on-budget delivery of the TMP.

A graduate of Geneva College, he holds a BA in Mechanical Engineering and an MBA. Mr. Hoback began working for the Authority in 2000 and has more than 20 years of industry experience.

Lisa Naylor, Chief Human Capital Officer. Ms. Naylor is responsible for the overall leadership and management of human capital planning, organizational development, and change management strategies for the Airport and the Airport System. Additionally, she provides oversight to human resources planning, policy, and program development, including succession planning, performance management, and employee and labor relations.

A graduate of Robert Morris University, she holds a BA in Business Administration and a MBA in Human Resources Management. Ms. Naylor began working for the Authority in 2000 and has more than 20 years of experience in human resources.

TRANSFER OF AIRPORT SYSTEM TO THE AUTHORITY

Pursuant to the Transfer Agreement, the Authority leases the land, buildings, fixtures and improvements constituting the Airport System from the County for an initial term of 25 years beginning in 1999, subject to two consecutive 25-year extensions exercisable at the option of the Authority. Other than the giving of notice by the Authority to the County, there are no conditions precedent to the Authority's exercise of its option to extend the lease of the Airport System to the Authority for the first 25 year renewal term commencing in 2024, and it is the Authority's intent to exercise such extension option. The County has also transferred to the Authority all of the County's right, title and interest in and to the equipment, materials, furnishings and other personal property owned and utilized by the County in connection with the administration, maintenance, management, regulation, operation, improvement, development and use of the Airport System. The assets constituting the Airport System transferred or leased to the Authority pursuant to the Transfer Agreement are sometimes referred to as the "Airport Assets."

In connection with the Transfer, the County also transferred to the Authority its right, title and interest in all licenses, permits, approvals, awards or decisions related to the Airport System, including grant agreements, the right to receive any amounts payable to the County in connection with the Airport System (including without limitation the Revenues) and all benefits of contracts and agreements. The Authority also assumed all of the County's obligations and liabilities pertaining to the Airport System.

In the event of an event of default by the Authority under the Transfer Agreement, the County, upon 30 days written notice to the Authority and the Authority's failure to cure said default, has the right to terminate the Transfer Agreement, in which event all right, title and interest in the Airport Assets shall revert to the County and the County will be responsible for all obligations incurred by the Authority prior to such termination including, but not limited to, bonds issued by the Authority, including the Bonds. Events of default under the Transfer Agreement include: failure by the Authority to pay any sum required to be paid to the County at the time specified in the Transfer Agreement after reasonable notice and demand by the County; failure by the Authority to observe or perform any material covenant, condition or agreement to be performed or observed under the Transfer Agreement (subject to the Authority's right to cure the failure and to force majeure); an event of bankruptcy or insolvency involving the Authority; abandonment of the Airport Assets by the Authority; or a default which would constitute an event of default under the County Ordinance (as defined in the Transfer Agreement).

THE AIRPORT

Airport System

The Authority leases and operates two airports -- Pittsburgh International Airport, the air carrier airport serving the Pittsburgh metropolitan region (the "Airport"), and the Allegheny County Airport, which serves as the general aviation reliever airport to the Airport (collectively, the "Airport System"). The Airport and the Allegheny County Airport are defined under the Indenture as the Airport System.

The Airport is classified as a medium air traffic hub by the FAA, which ranked the Airport 48th among U.S. airports in 2020 in terms of total enplaned passengers. The Airport served as a "hub" for the former US Airways until 2004, with US Airways representing approximately 80% of total enplaned passengers at the Airport in 2004. Since that time, the Airport has served some connecting traffic, but has been largely used by origination and destination ("O&D") travelers, whose trips begin or end in Pittsburgh. The Airport terminal was constructed in the 1990s when the Airport still served as a hub airport for the former US Airways. The TMP was designed in large part to reconfigure the Airport to better serve O&D travelers, which currently comprise approximately 98% of total passenger traffic. See APPENDIX B – REPORT OF THE AIRPORT CONSULTANT – "Airport Overview."

Air Trade Area

The Airport is located in southwestern Pennsylvania approximately 15 miles west of downtown Pittsburgh, near Interstate 376. The air trade area served by the Airport consists of the Pittsburgh Metropolitan Statistical Area ("MSA"), western Ohio, northern West Virginia and northwest Maryland. The Airport is currently the only medium hub airport serving the Pittsburgh MSA. The closest commercial airports are Cleveland Hopkins Airport (approximately 100 miles away) and Akron Canton Regional Airport (approximately 80 miles away). The 2019 population of the Pittsburgh MSA was estimated by the U.S. Department of Commerce, Bureau of the Census at approximately 2.3 million. An estimated 5 million people live within a two hour drive of the Airport.

The County is currently the location of several Fortune 500 corporate headquarters including PNC Financial Services (ranked 151), PPG Industries (ranked 209), United States Steel (ranked 247), Alcoa (ranked 302), Dick's Sporting Goods (ranked 362), and WESCO International (ranked 379). The County and surrounding area has undergone an economic transformation spanning more than four decades with a shift from the manufacturing industry to the service and trade industries. Specifically, the new focus industries have been technology (including information technology, robotics, artificial intelligence and autonomous vehicle development), health care, education, finance and energy. This shift is represented in the following table, which shows the largest non-governmental sector employers in the Pittsburgh area.

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Employer	Product or Service	Employees
UPMC	Education, healthcare	53,000
Highmark Health	Healthcare	23,846
University of Pittsburgh	Education	13,643
PNC Financial Services Group Inc.	Financial services	12,500
Giant Eagle Inc.	Retail/grocer	9,864
Wal-Mart Stores Inc.	Retail/grocer	9,000
BNY Mellon	Financial services	7,000
Carnegie Mellon University	Education	5,571
Eat'n Park Hospitality Group Inc.	Hospitality	5,083
Excela Health	Healthcare	4,309
United States Steel Corp.	Manufacturing	4,100
Heritage Valley Health System)	Healthcare	4,026
CVS Health	Pharmaceuticals	3,200
Butler Health System	Healthcare	3,015
Westinghouse Electric Co.	Nuclear power	2,800
Cigna	Health insurance	2,600
PPG	Paints and coatings	2,500
St. Clair Health Corp.	Healthcare	2,500
Concordia Lutheran Ministries	Healthcare	2,435
Verizon Communications	Telecommunications	2,383

Source: Largest Pittsburgh-area Employers, Pittsburgh Business Times, www.bizjournals.com; Fortune Magazine, Fortune 500 Companies, 2020, www.fortune.com.

The Pittsburgh MSA is home to numerous public and private institutions of higher education, including the University of Pittsburgh, Carnegie Mellon University, Duquesne University, Robert Morris University, Chatham University and Carlow College. According to the U.S. Census Bureau's most recent American Community Survey, nearly 140,000 students were enrolled in college or graduate programs in the Pittsburgh MSA in 2018. If extended beyond the MSA, but still within a roughly one-hour drive of downtown Pittsburgh, the number students enrolled in higher education increases to approximately 186,000 based on information from individual institution websites as of February 2020. The presence of these institutions of higher learning contributes to the MSA's higher levels of educational attainment and generates airline travel related to academic meetings and conferences, visiting professorships, and study-abroad programs, as well as individual travel by faculty, students, and their families. Additionally, close ties between the MSA's colleges and universities and the region's healthcare and technology industries help to foster the development of related high-value businesses and entrepreneurial ventures.

The Pittsburgh MSA is located atop a portion of the Marcellus, Utica and other shale formations, each a subterranean geologic deposit extending from West Virginia, through western Pennsylvania and eastern Ohio, into southern New York. As a result of advances in technology over the past decade, extraction of the natural gas trapped in the shale formations has become a major industry in the region. According to a Pennsylvania State University study, the Marcellus Shale in Pennsylvania created an estimated 98,000 new jobs and injected approximately $14.2 billion into the Commonwealth's economy in 2018. The shale exploration and drilling industry has added substantially to the economic base of the Airport's service area.

A significant example of the impact of the shale exploration and drilling industry on the Pittsburgh MSA is the ethylene cracker plant that Royal Dutch Shell is constructing in Beaver County, about a 15 minute drive from the Airport. That facility is expected to be completed in the early 2020s, and is expected to create up to 6,000 construction jobs to build the plant and up to 600 permanent jobs for employees working at the plant. The new cracker plant is also expected to spur other related development in the area where the plant will be located.

In October 2019, the Authority announced plans for Neighborhood 91, the world's first development to locate all components of the additive manufacturing/3-D printing supply chain into an industrial production ecosystem concept. Neighborhood 91, developed in conjunction with the University of Pittsburgh, is the first development of the 163-acre Pittsburgh Airport Innovation Campus and will be built adjacent to the Airport terminal campus and runway. Three companies have announced plans to establish operations at Neighborhood 91. Arencibia, a supplier of Argon gas used in additive manufacturing, has committed to be the anchor tenant. Wabtec Corporation, a Fortune 500 company providing equipment, systems, digital solutions and value-added services for freight and transit rail, is the first manufacturing tenant in the first building opened in March 2021. In March 2021, Rusal America, a global supplier of aluminum additive manufacturing powder, announced plans to locate its operations at Neighborhood 91. In June 2021, Cumberland Additive, an additive manufacturing firm headquartered just outside Austin, Texas, announced plans to open its second location in Neighborhood 91 with a focus on large format machines.

See APPENDIX B – "Report of Airport Consultant" under the caption "ECONOMIC BASIS FOR AIRLINE TRAFFIC" for additional information regarding the Airport's region.

Current Facilities at the Airport

Airfield. The Airport has approximately 8,800 acres of land. The Airport is supported by four runways, consisting of three parallel runways and one crosswind runway. The crosswind runway, Runway 14/32, is oriented northwest to southeast and the three parallel runways, Runways 10R/28L, 10C/28C, and 10L/28R are oriented east to west. All of the Airport's runways are designed to accommodate commercial aircraft. Runway 10R/28L is the Airport's longest runway, at 11,500 feet long. Runway 10L/28R is 10,502 feet long, 10C/28C is 10,775 feet long and 14/32 is 8,101 feet long. Precision instrument approach capability is provided to Runways 10R, 10L, 28R, 28L, and 32. Additionally, Runways 10R and 10L have the ability to handle Category II/III instrument landing systems and Runway 28R has the ability to handle Category II instrument landing systems. An Airfield Modernization Study being conducted in partnership with the FAA is currently underway. The study is examining the feasibility of closing one runway due to overcapacity to achieve more efficient airfield operations and potentially reduce capital and O&M costs.

Terminals. The Midfield Terminal opened on October 1, 1992 and consists of approximately 1.7 million square feet of enclosed space. The Midfield Terminal currently consists of a four-level landside terminal, a four- level airside terminal (with a tower in the center core on the fifth through seventh levels) connected to the landside terminal by an automated underground people-mover system and a two-level central services building. The landside terminal houses pre-security and ground transportation operations (passenger drop-off, ticketing/check-in, baggage claim and the security checkpoint). If an alternative use for the existing landside terminal is not identified, than the existing landside terminal would be demolished and the automated people mover will be abandoned in place upon completion of the TMP.

The "X-shaped" airside terminal has two major elements - a central "core" and four concourses. The Midfield Terminal with 75 gates was originally constructed to function as a major hub facility for the former US Airways to support a major connecting hub operation. As a result of de-hubbing in 2004, the number of gates in use was reduced, and the Authority removed gates from service in anticipation of constructing the TMP. New, common use technology and equipment also reduced the number of gates necessary for daily airline operations, so that 52 gates are currently available for use, of which five are equipped to accommodate arriving international passengers. The Midfield Terminal also originally included a commuter terminal. However, due to the reduction in connecting traffic and the discontinuation of service to many smaller communities, the commuter terminal was closed for operations and currently serves as an alternative security checkpoint.

Arriving international passengers clear immigration and customs through a Federal Inspection Services ("FIS") facility comprising approximately 60,000 square feet, which can accommodate roughly 800 passengers per hour. The current FIS facility was designed primarily for connecting international passengers and is incorrectly configured for the needs of an O&D market. The TMP will address this deficiency and renovate the facility for the new Customs and Border Patrol ("CBP") Airport Technical Design Standards that were updated in 2017 for all new and renovated FIS facilities. Under the new standard passengers must collect their bags first before checking in with a customs officer. The renovated FIS facility also will provide for implementation of "Simplified Arrival", an enhanced international arrival process that uses facial biometrics to automate the manual document checks that are already required for admission into the United States. This design also supports CBP's current inspection requirements and is adaptable to future workloads, technologies, and operational needs.

Parking and Rental Car Facilities. The Airport's current three-level parking garage contains approximately 2,100 public parking spaces, a rental car facility with 850 ready and return spaces, and 149 leased parking spaces for a total of approximately 3,099 parking spaces. The parking garage is connected to the landside terminal by an enclosed walkway that crosses over the Airport's public arrivals roadways. Additionally, the Airport has 12,344 surface public parking spaces in its long-term, walkable economy and extended-term parking lots and 1,430 employee parking spaces in employee surface parking lots, all of which are within walking distance of the terminal. Those facilities will be maintained throughout construction of the TMP and will be replaced by a new multimodal center as part of the TMP. Some employee parking will be relocated during construction of the TMP.

As a result of the sharp contraction in passengers due to the pandemic, the Authority closed the extended term lot, reduced the number of spaces in the long-term, suspended the shuttle bus service, and reduced the parking rates for the garage and long-term lot in late March 2020. On April 12, 2021, the extended term lot was reopened, shuttle bus service was reinstated, and the rates for the garage and long-term lot reverted to pre-pandemic levels. Also in April 2021, 2,500 spaces from the extended term lot were converted to long-term lot spaces to accommodate employee parking spaces that were displaced for TMP construction staging on the former Concourse E apron.

Terminal Roadways. The main Airport entrance consists of a four-lane roadway which provides access to the Airport's landside terminal and parking facilities.

Other Aeronautical Facilities. There are also numerous airfield and aviation-related facilities at the Airport, including an above-ground 8.4 million gallon fuel farm and automotive fuel storage facility, a hydrant fueling system that serves the jet gates, a 488,529 square foot aircraft maintenance and parts facility leased by American Airlines, aircraft maintenance facilities operated by Republic Airways in two hangers containing a total of 99,605 square feet, a catering/food preparation facility leased by LSG Sky Chefs, several deicing facilities, three corporate hangars leased to third parties, a jet engine test cell facility, and a full-service state of the art fixed base operator.

Commercial Development Areas. There are approximately 3,317 buildable acres of land at the Airport and available to the Authority for non-aviation development, which includes 1,200 acres already developed, 70 acres that are occupied by community parks in Findlay and Moon Townships, and 230 acres that are occupied by gas drilling operations. Approximately 2,217 acres remain available for future development. In addition, approximately 5,000 acres of land at the Airport are included in "Foreign Trade Zone 33" operated and controlled by the Regional Industrial Development Corporation of Southwestern Pennsylvania, a privately funded nonprofit entity focused on managing and developing research and business parks. Significant development activities have been undertaken by the Authority in order to provide "pad ready" development sites, including the completion and continued development of infrastructure, including roadways and installation of utility services to develop further commercial office and industrial uses. Dick's Sporting Goods has located its corporate headquarters at the Airport; those facilities include one of the corporate hangars noted in the prior section. The Authority has entered into numerous ground leases with major development companies for over 3,000,000 square feet of office park, flex space, distribution facilities and other similar uses. The Authority is also developing Neighborhood 91 to be a center for advanced manufacturing, particularly additive manufacturing and 3D-printing. The Authority broke ground on Neighborhood 91 in 2020 and will add another 1,200,000 square feet as the park is developed. Rents or other payments of any nature received now or in the future attributable to any ground leases, facility leases or other developments which are identified as Neighborhood 91 are excluded from "Revenues" under the Indenture. The Authority is working with a developer which is expected to break ground for a new building on Site 9 (McClaren) in 2021 with 400,000 square feet planned. Additionally, development of the Northfield site is expected with a ground breaking for a new building planned for 650,000 square feet. In total the Authority has more than 2,000,000 square feet planned over three developments. Revenues from the various developers and land tenants are utilized by the Authority for further investment in development activities. In 2020, approximately $4,540,626 of revenue from these development activities represented Revenues under the Indenture. See APPENDIX B – "Report of Airport Consultant" under the caption "AIRLINE TRAFFIC ANALYSIS – Commercial/Industrial Property Development".

Microgrid. The Authority has developed a first-of-its-kind 20 megawatt energy plant and 3 megawatt solar facility microgrid that was built, financed, operated, and maintained by Peoples Natural Gas and will support normal operations for the airfield, terminals, the Hyatt Hotel, and the gas station/convenience store. The microgrid is able to operate independently from the grid, but the Authority will maintain an interconnect with Duquesne Light for emergency or back-up power. The microgrid is fueled in part by the natural gas sourced from the wells drilled on Airport property and serve five natural gas generators, as well as approximately 9,400 solar panels across 8 acres. The Airport's current peak demand is approximately 14 megawatts; therefore, the microgrid can supply 100% plus of the Airport's electricity demand. Peoples Natural Gas will be permitted to export excess capacity to the grid and retain the revenues from such activity. The microgrid is expected to provide savings in energy expenses to the Authority as well as bring power resiliency and redundancy to enhance safety and ensure continued operations. The microgrid became fully operational in July 2021.

Other Facilities. The Authority operates an aircraft rescue and firefighting training center at the Airport, which includes a fire training simulator as well as classrooms, a management center, a vehicle bay, trainee/equipment support areas and a visitors center.

In addition, the County recently relocated its emergency response and 911 call center to the Airport on property leased from the Authority. The call center provides centralized 911 emergency call and response services to the entire County.

Cargo Operations

Five cargo carriers, FedEx, UPS, Amazon (Sun Country), Qatar Cargo and Mas Air, are signatories to Airfield Use Agreements relating to the use and lease of the airfield for cargo operations. Currently, the stated Airfield Use Agreements are on a month-to-month basis while negotiation of new Airfield Use Agreements proceeds. Total air cargo at the Airport increased an average of 1.2% per year between 2010 and 2020, with stronger growth from 2015 to 2020 (2.4% per year, on average) due largely to growth by all-cargo airlines, including FedEx, UPS and new freighter service by Qatar. Prior to the pandemic, new international service on airlines operating wide-body aircraft such as British Airways to London Heathrow further complemented cargo growth.

In 2020, total air cargo at the Airport decreased by 2.4% compared to 2019, reflecting a decrease in air cargo on passenger airlines as the number of passenger flights and available belly capacity for air cargo were reduced due to the pandemic and the economy. In contrast, all-cargo airlines handled slightly more air cargo in 2020 (an increase of 0.1%). During the first six months of 2021 (January through June), total air cargo at the Airport increased 19.6% compared to the same period in 2020, reflecting an 18.4% increase by all-cargo airlines and a 46.1% increase by passenger airlines. In December 2020, Qatar Airways resumed cargo service at the Airport, following a temporary pause dating back to December 2019.

In December 2020, Qatar Airways resumed its cargo operations at the Airport following a pause in operations dating back to December 2019, and continues its weekly flight on a converted Boeing 777-300ER. Additionally, Cathay Pacific used a similar aircraft for cargo flights between Pittsburgh and Hong Kong that ran twice weekly from September to November of 2020.

On April 27, 2021, Finnair initiated cargo service from Helsinki to the Airport with Airbus A350-900 aircraft. The service is planned to be short-term, with flights operating in April and May. On May 13, 2021, Amazon Air initiated service to the Airport through Sun County Airlines with one daily Boeing 737-800F freighter to Fort Worth Alliance Airport. Cathay Pacific has indicated that it will resume service with twice weekly cargo flights. In addition to Qatar and Cathay Pacific, Finnair also provided all cargo service from Helsinki to the Airport with Airbus A350-900 aircraft in April and May 2021 and SpiceXpress initiated service in July 2021 operating Airbus A340-300 aircraft from Vietnam.

In May 2021, cargo tonnage increased 22.6% compared to May 2020. The spike in air freight is attributed to cargo carriers utilizing larger aircraft and increasing the number of operations at the Airport. FedEx and UPS increased their operations at the Airport for the first five months of 2021 relative to the same period in 2020 by 45%.

At congested cargo gateways like New York and Chicago, airlines and freight forwarders often have to wait days to get their products offloaded and on the road. At the Airport, that can happen in a matter of hours. Cargo carriers have consistently referenced that speed as a major reason to utilize the Airport. In addition, the Authority also signed a memorandum of understanding with Ted Stevens Anchorage International last summer to collaborate in better streamlining the global air cargo supply chain.

In September 2020, Amazon opened its newly constructed 1 million-square-foot fulfillment center located about three miles from the Airport, where roughly 1,000 employees pack and ship products. In March 2021, Amazon announced its lease of 270,000 square feet for a sortation facility in Findlay, located about six miles from the Airport.

The Authority is engaged in strategic planning to further increase cargo operations at the Airport. In November 2019 the Airport was awarded an $18.7 million federal grant by the U.S. Department of Transportation ("USDOT") through the Better Utilizing Investments to Leverage Development program, to be used to build a 75,000 square foot cargo processing facility and an adjacent surface parking lot, which are expected to be constructed by 2024. The new building will enable the Airport to serve additional cargo aircraft and offer opportunities for airlines that require sorting facilities and access for high volumes of trucks.

Environmental Matters

In January of 1998, the Pennsylvania Department of Environmental Protection ("DEP") issued an Administrative Order to the County alleging violations of a January 1994 Consent Order and Adjudication (the "Consent Order") and violations of the Pennsylvania Clean Streams Law at the Airport. The alleged violations have been resolved except for issues relating to stormwater containing deicing chemicals ("DIW"). The Authority continues to negotiate the DIW issue with DEP. In connection with these negotiations, the Authority agreed to construct in-stream lined retention basins in the East Fork of Enlow Run and West Fork of McClarens Run, a conveyance system between the two basins, and a 10 million gallon per day (MGD) peak flow deicing stormwater treatment facility (the "Treatment Facility") to treat the DIW collected in the retention basins. The retention basins and conveyance system have been constructed but the Treatment Facility has not been constructed. In December 2006, the Authority amended its NPDES permit renewal application to include discharges from the Treatment Facility when it is constructed. DEP prepared a draft NPDES renewal permit in 2010, which included proposed effluent limits for the Treatment Facility; however the comments were never addressed by the DEP, and as a result, the project stalled and the Treatment Facility was never constructed. Both the Authority and the U.S. Environmental Protection Agency ("EPA") submitted comments on the draft permit to DEP. In August of 2020, DEP prepared a revised draft NPDES permit, again with proposed effluent limits for the Treatment Facility, and published notice of the draft permit in the Pennsylvania Bulletin for public comment. The Authority again submitted comments which DEP is currently considering. The Authority's comments include, inter alia, a request for additional time to update studies on DIW generation and treatment, as well as receiving stream conditions, as these are now significantly outdated, and reconsideration of the proposed Treatment Facility effluent limits that are based on the DEP's guidance regarding discharges to intermittent and ephemeral streams, which the Authority believes is inapplicable. The Authority has also, in good faith, initiated a non-deicing season sampling program that may be useful in demonstrating the changing conditions (significant reductions in deicing chemical usage) over the past 10 years as well as provide data that may be useful for a redesign of the proposed Treatment Facility. As of the date of this Official Statement, DEP has not issued a final NPDES renewal permit which would authorize discharge from the previously proposed Treatment Facility. The cost to construct the Treatment Facility is estimated to be between $46,700,000 and $74,500,000, depending on the effluent limits and other conditions in the final NPDES permit renewal. In addition, the Authority expects that there will be recurring costs of between $3,400,000 and $3,900,000 annually for operations and maintenance of the collection and conveyance systems and the previously proposed Treatment Facility, again depending on the effluent limits and other conditions in the final NPDES permit renewal. Since negotiations with the DEP are ongoing and a final NPDES permit renewal has not yet been issued, the final solution to meet the project objectives, including the final Treatment Facility design and the cost for both construction and operations and maintenance (if any), are subject to change.

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AIRPORT ACTIVITY INFORMATION

Enplaned Passengers at the Airport

The following table presents the total enplaned passengers at the Airport from 2009 through 2020 and the first three months of 2020 and 2021. In 2020, the number of enplaned passengers at the Airport decreased 62.8%. reflecting the impact of the COVID-19 global pandemic and economic recession. During the first six months of 2021 (January through June), enplaned passengers increased by 17.6% compared with the same period in 2020, including a 316% increase in June 2021 compared to June 2020, as shown in the tables below.

Pittsburgh International Airport
Enplaned Passengers by Airline Group
2009 – 2020

Year	Mainline Airlines	Regional Airlines	Foreign-flag Airlines	Low Cost Carriers	Total	Annual percent increase (decrease)
2009	1,307,596	1,464,458	15,944	1,210,699	3,998,697	
2010	1,380,012	1,350,980	19,595	1,332,091	4,082,678	2.1%
2011	1,435,140	1,348,940	22,508	1,337,192	4,143,780	1.5%
2012	1,445,677	1,299,516	22,837	1,232,437	4,000,467	(3.5%)
2013	1,512,011	1,208,660	22,452	1,184,870	3,927,993	(1.8%)
2014	1,528,718	1,251,729	23,325	1,181,456	3,985,228	1.5%
2015	1,500,462	1,241,332	33,069	1,238,237	4,013,100	0.7%
2016	1,368,663	1,182,393	51,354	1,531,243	4,133,653	3.0%
2017	1,470,628	1,150,467	73,659	1,778,134	4,472,888	8.2%
2018	1,585,924	1,181,621	91,836	1,950,484	4,809,865	7.5%
2019	1,696,643	1,199,542	90,789	1,888,048	4,875,029	1.4%
2020	516,608	472,706	10,878	812,212	1,812,404	(62.8%)
Jan. – June						
2020	296,170	273,249	10,878	444,350	1,024,647	--
2021*	286,162	331,089	--	587,515	1,204,766	17.6%
	Annual percent increase (decrease)					
2016-2017	7.4%	(2.7%)	43.4%	16.1%	8.2%	
2017-2018	7.8	2.7	24.7	9.7	7.5	
2018-2019	7.0	1.5	(1.1)	(3.2)	1.4	
2019-2020	(69.6)	(60.6)	(88.0)	(57.0)	(62.8)	
2020-2021**	(3.4)	21.2	N/A	32.5	17.6	
	Compound annual growth rate					
2009-2014	3.2%	(3.1%)	7.9%	(0.5%)	(0.1%)	
2014-2019	2.1%	(0.8%)	31.2%	9.8%	4.1%	
2009-2019	2.6%	(2.0%)	19.0%	4.5%	2.0%	

* Estimate based on Allegheny County Airport Authority records.

** Represents percent change for the first six months (January through June).

Note: Includes scheduled passengers only.

Source: Monthly Analysis of Scheduled Airline Traffic Report

The following table shows the number of enplaned passengers for each month from January 2019 through June 2021.

Month	2019	2020	2021
January	327,605	336,827	107,785
February	319,682	340,727	116,798
March	413,440	185,198	183,237
April	399,749	15,928	209,809
May	439,144	47,074	275,302
June	449,313	98,893	312,290
July	456,314	125,088	
August	431,924	128,621	
September	393,430	120,284	
October	438,575	152,612	
November	393,216	137,133	
December	412,637	124,019	
Total	4,875,029	1,824,404	892,931

Source: Allegheny County Airport Authority records.

Air Service at the Airport

The Airport is served by 25 operating airlines, including four U.S. mainline passenger airlines, 12 regional airlines, five low-cost or ultra low-cost carriers, and three foreign-flag airlines. As of July 1, 2021, these airlines provided approximately 125 direct flights per weekday to 63 airports nonstop. The Airport is also served by five all-cargo carriers and by various charter airlines. The airlines serving the Airport as of July 2021, other than charter airlines, are listed below.

Mainline carriers	Low cost carriers and ultra low-cost carriers
Alaska Airlines	Allegiant Air *(a)*
American Airlines	Frontier Airlines *(a)*
Delta Air Lines	jetBlue Airways
United Airlines	Southwest Airlines
	Spirit Airlines *(a)*
Regional airlines	**Foreign flag airlines**
Boutique Air	Air Canada *(b)*
Breeze Airways	Condor *(c)*
Endeavor Air (Delta)	Sunwing
Envoy Air (American)	
Go Jet (United)	**All-cargo airlines**
Mesa Airlines (United)	Sun County Airlines dba Amazon Air *(d)*
Piedmont Airlines (American)	FedEx
Republic Airlines (American, Delta, United)	Qatar Cargo *(e)*
SkyWest Airlines (American, Delta, United)	UPS
Southern Airways Express	SpiceExpress
iAero Airways (previously Swift Air)	

(a) Ultra low-cost carrier (ULCC).
(b) Operated by Jazz Aviation and Air Georgian. Service to the Airport was suspended in 2020 due to the pandemic and is currently expected to resume in August 2021.
(c) Condor provides seasonal service to the Airport from May to September in each year.
(d) Sun Country initiated service on May 13, 2021 on behalf of Amazon Air.
(e) Qatar Cargo is the cargo branch of Qatar Airways.

Sources: Allegheny County Airport Authority records.

A new low-cost carrier, Breeze Airways, began nonstop service between Pittsburgh and Charleston, S.C. on July 8, 2021, and between Pittsburgh and Hartford, Providence, and Norfolk in late July, offering four flights per week on 108 seat Embraer 195 aircraft. In July 2021, SpiceXpress, the cargo division of Indian low cost carrier SpiceJet, initiated new service to the Airport operating Airbus A340-300 aircraft. Also, on August 2, 2021, Cathay Pacific is expected to return to the Airport operating two weekly flights with Boeing 777-300ER aircraft converted from passenger to cargo operations for five months.

Airline Market Shares

The following table presents the total enplaned passengers at the Airport by airline. Because of the impact of the pandemic on air travel during 2020, information is provided for both 2019 and 2020. American Airlines and Southwest Airlines represent approximately 50% of total passenger traffic at the Airport. Throughout the pandemic low-cost and ultra low-cost carriers like Spirit and Allegiant have increased their market share at the Airport.

Enplaned Passengers by Airline

Ranked by 2019 passengers

	Enplaned passengers			Percent of total		
Airline	2009	2019	2020	2009	2019	2020
Southwest	1,089,413	1,231,855	478,707	27.2%	25.3%	26.4%
American	1,357,625	1,136,330	431,438	34.0	23.3	23.8
Delta	689,693	921,353	279,350	17.2	18.9	15.4
United	651,699	759,498	243,810	16.3	15.6	13.5
Spirit	--	286,901	191,058	--	5.9	10.5
Allegiant	--	187,874	95,561	--	3.9	5.3
JetBlue	89,319	151,570	35,900	2.2	3.1	2.0
Air Canada	15,944	55,220	6,320	--	1.0	0.3
Alaska	--	50,897	25,040	0.4	1.1	1.4
Frontier	--	29,848	10,986	--	0.6	0.6
British Airways	--	25,909	4,558	--	0.4	0.3
Southern Airways	--	20,536	8,012	--	0.5	0.4
All Other	105,004	17,238	1,664	2.6	0.4	0.1
Airport Total	3,998,697	4,875,029	1,812,404	100.0%	100.0%	100.0%

Notes: Passengers reported by regional affiliates have been grouped with their respective code sharing partners. Data for merged airlines are reported together, i.e., Alaska and Virgin America, American and US Airways, Southwest and AirTran, United and Continental.

Includes scheduled passengers only.

Percentages may not add to 100% due to rounding.

Sources: Allegheny County Airport Authority records.

Other Airport Activity Statistics

The following table presents aircraft operations, landed weights and cargo volume at the Airport from 2015 through 2020:

Pittsburgh International Airport
Other Airport Activity Statistics
2015 – 2020

Fiscal Year	Aircraft Operations[1]	Landed Weight (1,000 Lbs.)	Cargo Volume (1,000 Lbs.)
2015	141,674	5,347,849	138,324
2016	141,630	5,387,059	150,239
2017	148,681	5,762,766	148,343
2018	151,414	6,196,005	156,219
2019	148,119	6,263,255	165,517
2020	91,803	3,703,501	148,007

(1) An operation is any aircraft landing or takeoff.

Sources: Federal Aviation Administration Tower Reports and Airline Self Reporting

Growth of Low-Cost Carriers

Low-cost carriers ("LCCs") are carriers that take advantage of an operating cost structure that is typically significantly lower than the cost structure of the network carriers and utilizes an increased reliance on fee revenues. These advantages can include lower labor costs, greater labor flexibility, a streamlined aircraft fleet (i.e., fewer different types of aircraft in a given airline's fleet) and a generally more efficient operation. These factors enable LCCs to offer a lower fare structure to the traveling public than network carriers while still maintaining profitability. Further, increased access to major markets for LCCs may moderate average airfare increases that can typically result from airline consolidation.

As the larger U.S. carriers consolidated and became more focused on capacity discipline, fare increases took hold. LCCs began to emerge in larger markets where passenger levels were high enough for the LCCs to overcome certain barriers to entry caused by the larger carriers such as control of the majority of airport gates and slots. The cost structure of LCCs allows for lower fares, which has stimulated traffic and driven LCCs into more and larger markets. One result of the consolidation of carriers and their capacity discipline and the associated fare increases is that certain price-sensitive travelers are flying less. Recently, these budget conscious flyers have emerged as an underserved segment which has helped to expand the LCC market to include ultra low-cost carriers ("ULCCs") such as Allegiant, Frontier and Spirit. The ULCC business model is characterized by an unbundling of services, so that the purchase of a ticket on a ULCC generally covers only the seat. Other amenities such as specific seat selection, onboard food and drink, checked and carry-on luggage and paper boarding passes are then available for an additional charge.

LCCs such as JetBlue and Southwest and ULCCs such as Allegiant, Frontier and Spirit have significantly increased their service at the Airport, carrying a combined 1.62 million total passengers in 2020, representing approximately 44% of total passengers, as compared to 38% in 2019. In 2019, ULCCs accounted for 10.4% of enplaned passengers at the Airport, which share of enplaned passengers increased to 16.4% in 2020 due to the larger share of leisure passengers traveling during the pandemic. The growth of LCCs and ULCCs has further diversified the Airport's air service portfolio with multiple carriers serving the Airport and the Pittsburgh region.

Commuter Service

Two airlines, Boutique Airlines and Southern Airways Express, operate non-stop service (as of March 2021) between the Airport and five cities, including four in Pennsylvania and one in West Virginia. The airlines and airports that make up this regional network, collectively known as the PIT Connector, meet quarterly to work on joint initiatives designed to increase enplanements to these five cities. The efforts of this group have been recognized by the U.S. Department of Transportation Working Group on Improving Air Service to Small Communities as an example of public-private partnerships that are successful in attracting and retaining air service in small communities.

Parking and Ground Transportation

Parking and ground transportation are significant sources of non-airline revenues. These revenues are generated from sources that include: fees from on-Airport parking facilities; trip fees paid by taxis and transportation network companies ("TNCs"); and rental car transactions. Total revenue from these revenue sources was approximately $21.6 million in 2020, compared to $53.3 million in 2019 and $49.6 million in 2018. While passenger levels had been increasing prior to the COVID-19 pandemic in 2020, the relative market share of these sources of revenue had been shifting.

Parking

The Airport's total parking capacity is approximately 13,636 public vehicles (excluding rental car areas and employee parking). Parking facilities include a three-level parking garage adjacent to the current landside terminal that contains 2,100 public parking spaces, a long-term lot with 4,390 spaces, an extended-term lot with 7,100 spaces, and a Gold Key lot adjacent to the landside terminal with 86 spaces that are available for rent on a monthly basis. The Authority believes that with the planned opening of the approximately 3,300 space TMP garage in 2025, along with 2,750 adjacent walkable surface stalls, and a sufficient supply of remote extended lot stalls (as determined by demand), it will have adequate capacity to serve projected demand through the projection period. Parking rates are set by the Authority and can be changed from time to time by the Chief Executive Officer, subject to approval by the Authority's Board of Directors. Parking revenues totaled approximately $36.9 million in 2018 and $41.6 million in 2019, but decreased significantly to $13.7 million in 2020 as a result of the impact of the pandemic on air travel.

Rental Cars

Three companies representing seven brands of rental car companies currently operate at the Airport from the garage, including: (1) Avis Budget Group (Avis and Budget brands); (2) Enterprise Holdings (Enterprise, Alamo and National brands), and (3) The Hertz Corporation (Hertz and Dollar). All three companies operate on-Airport and operate under the terms of concession and related agreements that provide that the companies pay the greater of a minimum annual guarantee ("MAG") or a percentage fee of 10% of gross revenues plus space rentals (counter, office and garage spaces) and ground rentals (vehicle processing and maintenance) rent for their facilities in the terminal and garage. The MAG payments are waived or reduced if the number of passengers in a given month is less than 75% of the number in the same month of the prior year. Such MAG waivers or reductions applied beginning in March 2020 and expired April 1, 2021. . Under the concession agreements, the rental car companies also lease from the Authority approximately 800 rental car ready/return stalls located on the first level of the garage and Hertz leases from the Authority a Quick Turn Around (QTA) facility. There are no off-Airport rental car companies currently serving the Airport. The Hertz Corporation filed for bankruptcy in May 2020 but continued to operate and has, among other things, assumed its leases at the Airport. The Hertz Corporation emerged from bankruptcy in July 2021.

The concession and related agreements were scheduled to expire on April 30, 2020, but the Authority negotiated an extension, effective January 1, 2020, through the earlier of DBO of the TMP or December 31, 2023. The extended agreements (1) broadened the definition of gross revenues (for purposes of the 10% percentage fee) to be all-inclusive with few exceptions, (2) adjusted MAGs to equal 85% of 2018 gross revenue, (3) incorporated the ready/return and the Hertz QTA into the concession agreement, (4) adjusted rents for terminal counters, ready/return spaces, staging areas, and the Hertz QTA, and (5) updated other provisions to current industry standards.

With the current rental car agreements expiring on December 31, 2023, the Authority intends to rebid the agreements in the future and enter into new ones that address the move of the ready/return spaces to the TMP MMC. The rental car services areas are expected to remain in their current locations unless the Authority and the rental car companies can reach an agreement to move and/or expand the current facilities.

Ground Transportation Services

TNCs, which were introduced to the Airport in 2015 and have grown in popularity among Airport passengers, have affected parking revenues and revenues from taxi and livery transportation. The popularity of TNCs has increased because of the convenience of requesting a ride through a mobile application, the ability to pay for this service without providing cash or other payment to the hired driver, and competitive pricing.

In 2015, the Authority awarded Non-Exclusive Operating Permits to Provide Transportation Network Company Services at Pittsburgh International Airport ("TNC Permit") to two TNCs, Raiser PA, LLC, a subsidiary of Uber Technologies, Inc. ("Uber"), and Lyft, Inc. ("Lyft"). Effective June 1, 2015, the TNC trip fee was established by the Authority through its Ground Transportation Regulations at $2.90 per pickup. The TNC Permits were replaced with new permits effective March 1, 2019, at which time the trip fee was increased from $2.90 per pickup to $3.35 and a new drop-off trip fee was levied at $3.35 under an update to the Ground Transportation Regulations commencing February 1, 2019. The TNC permits were renewed in February 2021 for two years. The TNC rate was raised for both pickup and drop-off to $4.00 effective March 1, 2020. Consistent with the increases in the TNC rates, the Authority increased the trip fee for taxis from $2.00 to $2.50 in 2019 and subsequently to $3.00 in 2020. Additionally, the TNC operating permit now extends to Allegheny County Airport.

TNCs recorded 484,121 pickups at the Airport in 2019 and 261,358 pickups at the Airport in 2020, accounting in 2020 for approximately 69.9% of total commercial for-hire trips (including taxis, livery transportation and TNCs) on-Airport. The Authority estimates the new fee structure would have increased TNC revenues driven in part by the increase in fees and the addition of AGC to the TNC operating permit. However, until normal traffic patterns return to the airline industry in general and to the Airport in particular, the Authority is not expecting to realize such increase in TNC revenues over 2019.

The Authority actively monitors all modes of ground transportation to assess trends, which include potential impacts from TNCs. Based on activity to date, the Authority believes TNCs are impacting other primary ground transportation modes to varying degrees, including taxi, limo and livery volumes. While the Authority had not seen a reduction in parking revenues prior to the pandemic, there was a reduction in the propensity of passengers to use the Airport's parking facilities. Between 2016 and 2019, the number of parking transactions increased 4%, while the number of originating passengers increased 18%, resulting in an 12% decrease in the propensity to park as measured by parking transactions per enplaning passenger. The decreased propensity to park is the result of changing airport access travel choices attributable to changes in the relative cost and convenience of competing travel modes, in particular TNCs.

TNC activity and other technologies which may be developed in the future may adversely impact the Airport's parking operations. Rental car transaction days had been relatively flat since the introduction of TNCs at the Airport in June 2015 even as passengers have increased; however, rental car transactions did decrease by approximately 0.8% in 2019 compared to the prior year. Prior to the pandemic, TNCs appeared to have affected all modes of transportation to and from the Airport. However, TNC trips declined more than parking and rental car transactions during the pandemic, reflecting hygiene concerns and the desire to minimize the prospect of close contact with others. Although the ultimate impact cannot be predicted by the Authority at this time, the Authority expects that the TNCs will have a modest negative impact on parking and rental car revenues.

Technological Innovations

In addition to TNCs, new technologies (such as autonomous vehicles) and innovative business strategies in established markets (such as commercial ground transportation and car rental) may continue to occur and may result in further changes in Airport passengers' choice of ground transportation mode. See "CERTAIN INVESTMENT CONSIDERATIONS – Technological Innovations in Ground Transportation."

Concession Program

The Airport was one of the first airports in the United States to adopt a shopping mall-type approach for its various retail activities. In general, the Airport attempts to provide the atmosphere and selection of a shopping mall, including various brand-name outlets, while maintaining "street" pricing. As of July 1, 2021, there were 28 operators in 42 locations in the Midfield Terminal, including 25 food and beverage locations, 13 retail locations, two service locations and 2 news and gift locations. By contrast, prior to the COVID-19 pandemic, as of December 31, 2019, there were 39 operators in 74 locations in the Midfield Terminal, including 33 food and beverage locations, 26 retail locations, seven service locations and eight news and gift locations. As of July 1, 2021, 78% of the food and beverage locations, 72% of retail locations, 67% of service locations, and 67% of news and gift locations were open.

The various retail activities in the Midfield Terminal are managed by a master concessionaire (the "Master Concessionaire") pursuant to the terms of a Master Lease Development and Concession Agreement (the "Airmall Agreement") with the Authority. The Airmall Agreement extends through December 31, 2029.

The Master Concessionaire is responsible for developing concession and retail activities at the Midfield Terminal for the Authority. Under the Airmall Agreement, the Master Concessionaire has the exclusive rights to all terminal concessions (except public pay telephones), including merchandising, retail, food and beverage services. The Master Concessionaire is not authorized to operate terminal concessions except in the case of a vacancy. The Authority receives 100% of revenues from electronic media, such as the Internet, flight information systems, and the wireless airport system. The Authority receives 77% of the revenues received by the Master Concessionaire from the various subtenants, with the balance retained by the Master Concessionaire. The Master Concessionaire also contributes to a repair and replacement fund to cover certain repair and replacement costs. The Master Concessionaire also contributes to a repair and replacement fund to cover certain repair and replacement costs and negotiates contracts with each concessionaire, which contracts generally obligate each concessionaire to pay the greater of a percentage of gross revenues (sales) or a MAG.

Most of the stores were temporarily closed beginning in late March 2020 due to the pandemic, and all but a few have reopened. Several are not expected to reopen. MAGs were not waived due to reduced concession sales during the pandemic, and as a result, the Authority decided to classify approximately $2.9 million of the uncollected MAGs as bad debt in its 2020 financial statements.

As noted earlier, the Authority executed a grant with the FAA for the CRRSA concession waiver program that totals $1,010,033 and submitted its concession program to the FAA for approval. The Authority also has submitted a grant application for the concession waiver program under ARPA that totals $4,040,132. A portion of these amounts will accrue to the Authority for unpaid MAGs accrued since December 27, 2020 when CRRSA was enacted.

FINANCIAL INFORMATION

The Authority accounts for the activities of the Airport System on the accrual basis of accounting according to accounting principles generally accepted in the United States of America. The financial statements of the Airport System are prepared and audited each year for the Authority. The Fiscal Year of the Airport System commences on January 1 and ends December 31. BKD, LLP served as the Authority's auditor for the fiscal years ending December 31, 2012 through December 31, 2018. Following a periodic request for proposals process, the Authority selected Plante Moran, PLCC to serve as its auditor for a five-year period commencing with the fiscal year ending December 31, 2019. The Authority's Annual Comprehensive Financial Report for the fiscal year ended December 31, 2020 is attached hereto as APPENDIX A.

The Authority implemented several accounting changes required by the Government Accounting Standards Board ("GASB") effective January 1, 2019. Such changes include GASB 88 (Certain Disclosures Related to Debt, Including Direct Borrowing and Direct Placements), GASB 87 (Leases), and GASB 83 (Certain Asset Retirement Obligations). The 2019 audited financial statements and 2020 audited financial statements included all the required note disclosures, if any, concerning the GASB requirements listed above. In addition, the Authority's 2020 Annual Comprehensive Financial Report includes the ten-year statistical section as provided in previous years.

Following the implementation of these accounting changes, the Authority elected not to restate the audited financial statements for fiscal years prior to 2019. Such a restatement was impractical due to the complexity of implementing the GASB requirements, the change in auditors with respect to the audited financial statements for fiscal years prior to 2019 and fiscal year 2019, and upgrades to the Authority's internal accounting structure beginning January 1, 2019 providing for, among other things, more detailed tracking of various income and expense items, which upgrades would also make it very difficult to restate the prior year financial statements.

The following table sets forth the historical operating results of the Airport System for fiscal years 2016 through 2020, based on the audited financial statements of the Authority for such fiscal years, as well as unaudited year-to-date operating results through June 30, 2020 and June 30, 2021. As noted above, effective January 1, 2019, the Authority adopted a number of accounting changes, and has elected not to restate its financial statements for fiscal years prior to 2019 to reflect such changes. Investors should recognize this point when reviewing the financial information set forth in the table.

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The Allegheny County Airport Authority
Statements of Revenues, Expenses and Changes in Net Position
Years Ended December 31, 2015 to 2020 (Actual - Audited) and
YTD June 2020 and 2021 (Actual - Unaudited)

(in Thousands)

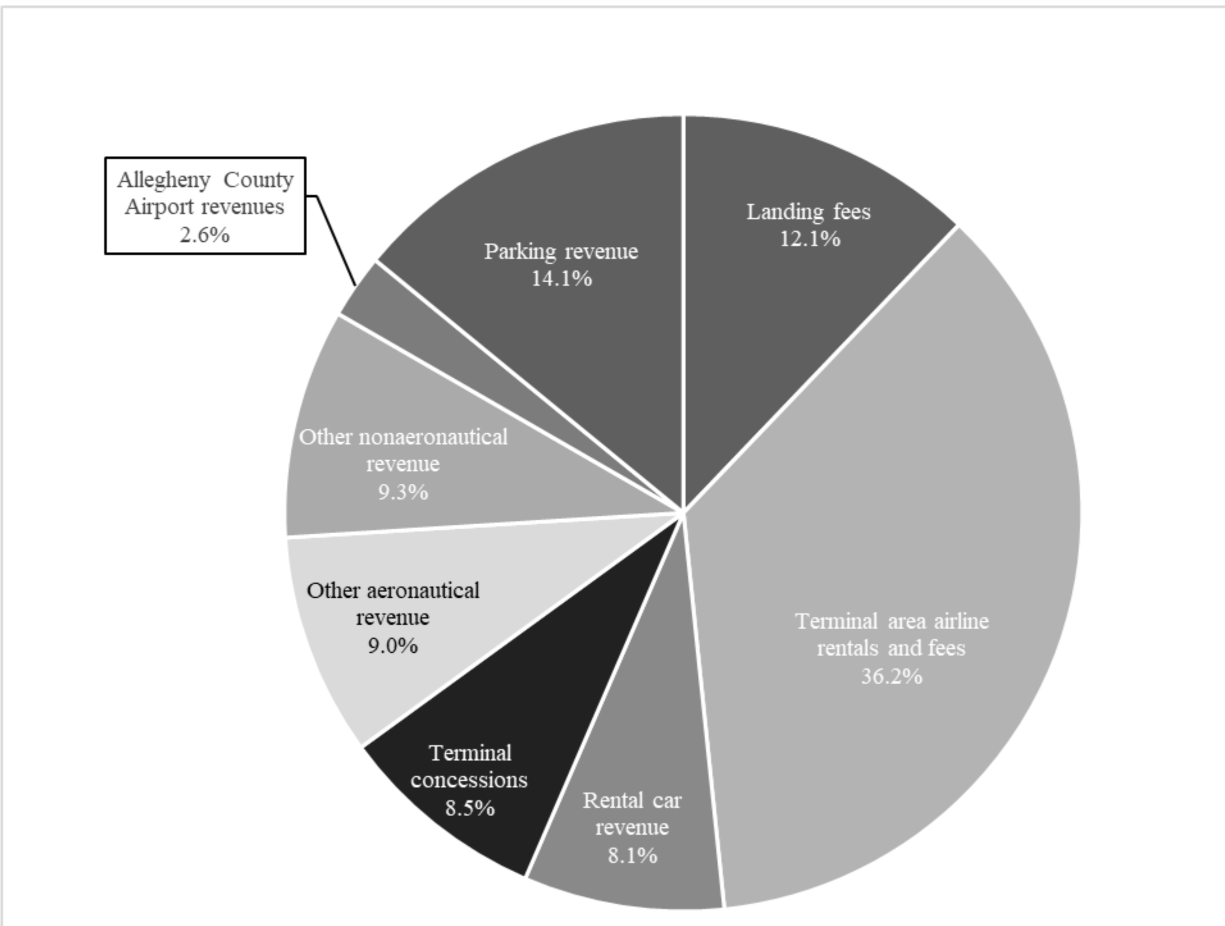
	2015	2016	2017	2018	2019	2020	YTD June 2020	YTD June 2021
Operating Revenues								
Landing fees	$12,448,844	$13,470,508	$14,365,250	$15,251,639	$17,279,723	$11,842,189	$6,298,069	$6,344,736
Terminal area airline rentals and fees	57,159,010	57,810,845	59,801,919	45,229,579	41,775,380	35,314,364	17,822,066	17,957,735
Other aeronautical revenue	8,695,472	8,633,244	8,820,789	11,164,643	8,908,660	8,797,493	4,115,029	4,250,159
Parking revenues	30,554,032	31,417,166	33,895,240	36,925,829	41,631,005	13,711,988	8,907,337	10,360,760
Rental car revenues	11,519,067	11,460,088	11,891,053	12,714,616	12,510,219	7,933,045	3,948,732	4,522,804
Terminal concessions	7,455,056	7,890,938	8,028,157	10,577,565	10,707,375	8,281,487	2,976,903	2,212,943
Other nonaeronautical revenue	6,414,724	6,203,074	7,166,081	8,194,466	8,938,623	9,088,397	4,162,382	4,168,206
Total Pittsburgh International revenues	134,246,205	136,885,863	143,968,489	140,058,337	141,750,985	94,968,963	48,230,518	49,817,343
Allegheny County Airport revenues	2,980,767	2,995,960	3,049,570	3,025,549	2,811,510	2,542,728	1,255,338	1,305,323
Total operating revenues	$137,226,972	$139,881,823	$147,018,059	$143,083,886	$144,562,495	$97,511,691	$49,485,856	$51,122,666
Operating Expenses								
Salaries, wages and benefits	39,943,997	47,003,628	48,904,569	54,194,050	53,700,238	54,764,544	21,398,665	20,761,584
Utilities	10,596,853	10,355,357	10,216,075	11,006,337	10,860,849	9,086,233	4,843,222	4,710,991
Cleaning and maintenance services	16,479,835	17,143,416	16,807,122	18,358,890	18,917,978	18,171,130	8,943,644	8,326,349
Professional services	17,468,184	18,949,222	20,818,792	23,374,112	23,445,358	24,662,534	11,049,133	13,093,879
Other	9,387,942	9,627,834	9,802,286	15,701,513	13,291,357	11,218,139	4,845,995	3,865,174
Pittsburgh International expenses	93,876,811	103,079,457	106,548,844	122,634,902	120,215,780	117,902,580	51,080,659	50,757,977
Allegheny County Airport expenses	2,917,479	2,808,271	3,281,416	3,060,059	2,594,279	2,504,576	1,353,487	1,172,634
Depreciation	56,782,417	56,805,124	55,642,763	55,786,882	56,981,022	60,417,786	28,611,041	28,801,579
Total operating expenses	$153,576,707	$162,692,852	$165,473,023	$181,481,843	$179,791,081	$180,824,942	$81,045,187	$80,732,190
Income (Loss) From Operations	**$(16,349,735)**	**$(22,811,029)**	**$(18,454,964)**	**$(38,397,957)**	**$(35,228,586)**	**$(83,313,251)**	**$(31,559,331)**	**$(29,609,524)**
Nonoperating revenues (Expenses)								
Interest expense	$(12,769,066)	$(9,901,627)	$(7,100,150)	$(4,320,322)	$(3,537,841)	$(881,263)	$(286,635)	(511,593)
Investment income	559,527	841,899	1,869,435	2,667,551	4,641,026	725,293	463,707	167,202
Customer facility charges	5,030,877	4,990,737	4,893,987	5,928,821	9,536,624	4,585,923	2,099,853	2,629,505
Passenger facility charges	15,856,825	16,176,674	17,794,862	19,023,229	18,979,556	6,945,191	4,513,383	6,041,678
Gain (Loss) on disposal of capital assets	39,551	(1,088,113)	-	(12,504)	(7,732)	1,550,691	1,772,441	(1,130)
Gas drilling revenues	10,192,316	13,978,971	25,983,025	19,266,592	10,121,571	5,559,879	3,112,141	161,686
Gaming act revenues	12,400,000	12,400,000	8,000,000	8,000,000	12,400,000	12,400,003	3,100,000	2,889,726
Grant revenue	--	--	--	--	--	13,091,912	17,362,720	--
Miscellaneous	599,277	894,399	2,498,496	322,646	203,669	(54,997)	230,112	15,475,892
Loss on in-substance debt defeasance	--	--	--	--	(3,635,528)			196,691
Net increase (decrease) in fair value of investments	35,676	(49,040)	(483,433)	203,976	386,528	(113,508)	75,454	(35,666)
Total nonoperating revenues, net	**$31,944,983**	**$38,183,900**	**$53,456,222**	**$51,079,989**	**$49,087,873**	**$43,809,124**	**$32,443,176**	**$27,013,991**
Income Before Capital Contributions and Grants	**15,595,248**	**15,372,871**	**35,001,258**	**12,682,032**	**13,859,287**	**(39,504,127)**	**883,845**	**(2,595,533)**
Capital Contributions and Grants	**14,759,396**	**23,400,937**	**9,349,376**	**29,836,954**	**8,175,418**	**19,962,114**	**1,104,977**	**9,864,991**
Increase (Decrease) in Net Position	**30,354,644**	**38,773,808**	**44,350,634**	**42,518,986**	**22,034,705**	**(19,542,013)**	**1,988,822**	**7,269,458**
Net Position, Beginning of Period	**530,269,549**	**508,937,346**	**547,711,154**	**592,061,788**	**633,369,667**	**655,404,372**	**655,404,372**	**635,862,360**
Change in Accounting Principle	**(51,686,847)**	**-**	**-**	**(1,211,107)**	**-**	**-**	**-**	**-**
Net Position, End of Period	**$508,937,346**	**$547,711,154**	**$592,061,788**	**$633,369,667**	**$655,404,372**	**$635,862,359**	**$657,393,194**	**$643,131,818**

Management's Discussion of Recent Financial Results

The Authority employs a "cost center residual" methodology for setting airline rates and charges at the Airport. Under this approach, airline rates are set for each of several cost centers after taking into account the amount of revenue projected to be received in each cost center from sources other than the airlines (such as parking, concessions, etc.). The airlines are then obligated to pay the additional amount required to enable the Authority to meet all of its financial requirements, including operating expenses, debt service on all Bonds and various fund deposit requirements, and comply with its debt service coverage covenant.

Highlights of 2020.

The Authority's total operating revenues in 2020 were approximately $97.5 million, a decrease of approximately $47.1 million, or 32.5%, compared to 2019. The net decrease was primarily the result of reduced parking and rental car revenues, as well as landing fees and terminal area airline rentals and fees, due to the impact of the COVID-19 pandemic on airline travel. The major sources of operating revenue in 2020 are shown in the chart below:



As shown in the graph, the terminal area rentals and landing fees paid by the airlines represented approximately 48.3% of the Authority's total operating revenues in 2020. The remaining 51.7% was derived from "non-airline" sources such as parking, rental car revenues, terminal concessions, and various other sources. In 2019, terminal area rentals and landing fees represented approximately 40.9% of the Authority's total operating revenues, with the remaining 59.1% was derived from parking, rental car revenues, terminal concessions, and various other sources.

Combined parking and ground transportation revenues for 2020 decreased by $27.9 million, or 67.1%, compared to 2019 as a direct result of the 62.8% decrease in enplaned passengers from 2019 to 2020. Similarly, rental car revenues were down $4.6 million, or 36.6%, in 2020 as compared to 2019. Concession revenues also experienced a sharp decline due to the lower demand in 2020, resulting in many store closures, reduced hours of operation, and a total of $2.9 million in non-payments from AirMall subtenants, which revenue decrease was partially offset by a writeoff of certain fees payable by concessionaires that were not paid, offsetting the revenue losses due to the decrease in enplaned passengers.

Total operating expenses (including depreciation) increased by $1.0 million, or 0.6%, in 2020 as compared to 2019. Salaries, wages and benefits increased by approximately $1.1 million, mainly due to the continued application of GASB Statement No. 68, Accounting and Financial Reporting for Pensions. This application resulted in the recognition of additional pension expense of $14.7 million and $8.9 million in 2020 and 2019, respectively. Excluding the additional pension expense and depreciation, operating expenses were approximately $8.2 million lower in 2020 due to the implementation of various cost saving measures in response to the revenue losses discussed above.

Nonoperating revenues and nonoperating expenses both declined in 2020 compared to 2019, accounting for $5.3 million of the reduction in net position from 2019 to 2020. Non-capital grant revenues, which totaled approximately $13.1 million, consisted primarily of funds received via the CARES Act. Passenger and customer facility charges decreased by approximately $17.0 million due to the decline in passenger traffic during 2020. Gas drilling revenues were $4.6 million lower in 2020 as compared to 2019 due to a decrease in drilling volumes and market prices.

Capital contributions and grants increased by $11.8 million in 2020 as compared to 2019, primarily due to the receipt of $6.2 million in grants for security systems and aircraft ramp rehabilitation.

Highlights of 2019.

Total operating revenues during 2019 increased by approximately $1.5 million, or 1.0%, compared to 2018. The increase was primarily due to an increase in combined parking and ground transportation revenues for $4.7 million compared to 2018. Parking garage and lot revenues increased by $2.8 million due to higher passenger traffic and parking rate increases. Ground transportation revenues also increased by $1.9 million primarily due to increased participation of transportation network companies. The increase in parking and ground transportation revenues was partially offset by a net $1.4 million decrease in landing and terminal fees due to the residual nature of the airline agreements.

Total operating expenses (including depreciation) were approximately $1.7 million, or 0.9%, lower in 2019 as compared to 2018. The primary factors for this decrease were reductions in expenses, including a decrease in advertising costs decrease of $0.9 million and a decrease in Allegheny County Airport operating expenses of $0.5 million. Salaries, wages and benefits decreased by approximately $0.5 million from 2018 to 2019 due to employee attrition, which more than offset normal pay increases. The continued application of GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, resulted in the recognition of additional pension expense of $8.9 million and $9.0 million in 2019 and 2018, respectively.

Total net nonoperating revenues (expenses) were approximately $2.0 million, or 3.9%, lower in 2019 as compared to 2018. Interest expense was approximately $0.8 million lower, reflecting the Authority's amortization of long-term debt. Investment income was approximately $2.0 million higher compared to 2018 due to the investment of available funds in managed investment accounts (see Note 3 to APPENDIX A - ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE YEAR ENDED DECEMBER 31, 2020). Gas drilling revenues were approximately $9.1 million lower in 2019 as compared to 2018, primarily due to lack of market demand and related price declines.

Capital contributions and grants decreased by approximately $21.7 million, primarily due to $20.6 million in grant revenues related to deicing pad reconstruction received in 2018.

Highlights of 2021 Year-to-Date (through June 30, 2021).

Total operating revenues for the six months ending June 30, 2021 increased by approximately $1.6 million, or 3.3%, compared to the same period in 2020. The increase was primarily due to an increase in combined parking and ground transportation revenues of $1.5 million compared to 2020. Rental car revenues increased by $0.6 million primarily due to increased passenger activity. The increase in parking and ground transportation revenues and rental car revenues was partially offset by a $0.8 million decrease in terminal concessions revenues.

Total operating expenses (including depreciation) were approximately $0.3 million, or 0.4%, lower in the first six months of 2021 as compared to the same period in 2020. The primary factors for this decrease were reductions in Salaries, Wages and Benefits; Cleaning and Maintenance Services; and Other Expenses and a decrease in Allegheny County Airport operating expenses of $0.2 million. Salaries, wages and benefits decreased by approximately $0.6 million from 2021 to 2020 due to employee attrition. The continued application of GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, resulted in the recognition of additional pension expense of $14.7 million, $8.9 million and $9.0 million in 2020, 2019 and 2018, respectively.

Total net nonoperating revenues (expenses) were approximately $5.4 million, or 16.7%, lower in the first six months of 2021 as compared to the same period in 2020. Gaming revenues were $3.1 million lower compared to the prior period as a result of a change in the timing of the revenue recognition of such revenues. However, the Authority has received its full annual distribution of Gaming Revenues equal to $12.4 million for 2021. Operating Grant Revenue and Gain on Disposal of Capital Assets decreased by $1.9 million and $1.8 million, respectively. The Gain on Disposal of Capital Assets recognized for 2019 was due to a hangar sale at AGC, which was a one-time event.

Capital contributions and grants increased by approximately $8.8 million, which increase was primarily attributable to grant revenues in 2021 for snow plows, cargo site construction, the Pittsburgh Airport Innovation campus (Neighborhood 91) and the McLaren Road development site. Grant related construction activity was slow in 2020 due to COVID-19.

Debt Service Coverage

The Authority has calculated the annual debt service coverage ratio on its prior bonds issued under the Prior Indenture and other long term debt for the years 2015 through 2020. Such ratio was calculated for each year from 2015 to 2019 in accordance with the requirements of the Prior Indenture, which was defeased and discharged in December 2019. Under the Prior Indenture, the Authority was required to maintain, charge and collect, in each fiscal year, rates, rentals and other charges sufficient to provide Net Revenues (as defined in the Prior Indenture) equal to at least 125% of the Debt Service Requirements (as defined in the Prior Indenture) with respect to such fiscal year. Historic debt service coverage ratios were calculated by including certain PFC revenues, Gaming Revenues and Natural Gas Revenues as other available funds to pay debt service in particular years. For additional information regarding the debt service coverage ratio calculations under the Prior Indenture, see APPENDIX A – ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE YEAR ENDED DECEMBER 31, 2020.

The debt service coverage ratios as calculated for fiscal years 2015 through 2020 are presented in the table below.

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Debt Service Coverage Ratio[1]
2015-2020
(Dollars in thousands)

	2015	2016	2017	2018	2019	2020[2]
Pledged Revenues						
Landing fees	$12,449	$13,471	$14,365	$14,854	$17,280	$11,842
Terminal area airline fees	57,076	57,728	59,719	44,798	41,758	35,314
Other aeronautical revenue	7,808	7,691	7,818	8,770	8,297	8,798
Parking revenues	29,156	29,796	32,289	36,926	41,631	13,712
Rent-A-Car revenues	11,519	11,460	11,891	12,715	12,510	7,933
Terminal concessions	7,010	7,446	7,584	10,578	10,707	8,282
Other non-aeronautical revenue	43,235	44,742	34,433	22,519	12,821	21,748
Total pledged revenues	168,253	172,334	168,099	151,160	145,004	110,404
Operation and Maintenance Expenses						
Salaries, wages and related expenses	25,084	26,502	26,823	26,854	32,699	41,985
Cost allocations	38,713	40,697	43,540	51,471	44,664	--
Utilities	8,681	8,595	8,384	9,122	9,480	9,430
Cleaning and maintenance services	16,213	16,798	16,499	18,059	16,640	18,200
Professional services	285	236	553	340	187	24,719
Other	3,713	3,248	3,744	3,181	2,641	10,052
Total operation and maintenance expenses	92,689	96,076	99,543	109,027	106,311	104,386
Net Revenues	75,564	76,258	68,556	42,133	38,692	6,019
Plus: Other Available Funds	16,332	16,332	16,332	16,332	16,332	16,332
Total Net Revenues and Other Available Funds	$91,896	$92,590	$84,888	$58,465	$55,024	$22,350
Deposit Requirement Payments						
Deposits for debt service – Airport Revenue Bonds	$64,571	$64,914	$57,453	$16,686	$15,161	-
Deposits for debt service – General Obligation Bonds	-	-	-	-	-	-
Funding deposit requirement	301	598	174	410	429	-
Total deposit requirement payments	$64,872	$65,512	$57,627	$17,096	$15,590	-
Coverage Ratio	1.42	1.41	1.47	3.42	3.53	N/A

Source: Allegheny County Airport Authority

[1] Calculated by including certain PFC Revenues, Gaming Revenues and Natural Gas Revenues for payment of debt service.

[2] The Authority had no long-term debt outstanding during 2020.

Airline Costs Per Enplaned Passenger

The following table presents the costs per enplaned passenger at the Airport from 2016 through 2020. The decrease in cost per enplaned passenger through 2019 reflects increases in the total number of enplaned passengers, increases in nonairline revenues, strategic application of Authority discretionary revenues, and a reduction in annual debt service requirements on the Authority's debt. The increase in 2020 was due to the decline in passengers at the airport as a result of COVID-19.

Pittsburgh International Airport
Airline Costs Per Enplaned Passenger
2016 – 2020

	2016	2017	2018	2019	2020
Cost per enplaned passenger	$12.86	$12.76	$10.30	$9.77	$20.50

Other Authority Revenues

The Authority has identified additional revenue sources that it may elect to pledge to payment of debt service on the Bonds and/or O&M Expenses, including PFC revenues, CFC revenues, grants (including certain Federal COVID-19 Grants), Gaming Revenues and Natural Gas Revenues. Under the Master Indenture, the Authority may designate PFC revenues as PFCs Available for Debt Service, and may designate CFCs, grants (including certain Federal COVID-19 Grants), Gaming Revenues and Natural Gas Revenues as Other Pledged Revenues. Such designation is effected by filing a certificate with the Trustee containing, among other things, a representation that the revenues being designated may be validly designated as and included in PFCs Available for Debt Service or Other Pledged Revenues (as applicable) and stating the amount of funds being designated and the period of time for which such funds are designated.

PFC Revenues

Pursuant to authority granted by the Federal Aviation Administration (the "FAA") in a Record of Decision ("ROD") issued in October of 2001, the Authority implemented Passenger Facility Charges ("PFCs") at the Airport of $3.00 per enplaned passenger. Subsequent amendments to the ROD allowed the PFC to be increased in 2005 to $4.50 per enplaned passenger. The proceeds of the PFCs as well as any other similar charges which may be levied by the Authority in the future are excluded from the definition of Net Revenues in the Master Indenture. The PFCs, however, may be designated by the Authority as PFCs Available for Debt Service, and are not, unless so designated, pledged to payment of debt service on the Bonds. The PFC proceeds have historically been utilized by the Authority for payment of the costs of capital projects delineated in the Authority's application for approval to levy the PFCs, payment of certain PFC-backed debt service costs, and credit to airline rates and charges. As of the date hereof, there are no outstanding Authority obligations secured by a pledge of PFC revenues.

The following table shows the annual PFC revenues of the Authority for the past five years:

Year	PFC Revenues
2016	$16,176,674
2017	17,794,862
2018	19,023,229
2019	18,979,556
2020	6,945,191

The Master Indenture permits the Authority to pledge all or a portion of PFC revenues toward the payment of debt service on the Bonds (including future series of Bonds), or payment of debt service on obligations secured solely by PFCs, or on Subordinate Obligations issued under the Master Indenture, or on capital expenditures. See APPENDIX C – "FORM OF MASTER INDENTURE." The Authority intends to designate certain TMP costs as a PFC-eligible project upon receipt of FAA approval, thereby permitting the Authority to designate a portion of its

PFC revenues as PFCs Available for Debt Service and deposit them to the Debt Service Fund where they will be available for payment of all or a portion of the Debt Service Requirements on the 2021 Bonds or additional Bonds that may be issued in the future for the TMP.

The Authority has received approval from the FAA to collect and use PFCs for a total of $566 million in collection authority at the $4.50 level, including $62 million approved in December 2019 for the PFC-eligible design costs of the TMP and associated financing costs, also at the $4.50 level. The Authority's current collection authority extends to January 1, 2034. During mid-2021, the Authority intends to submit a new application to collect and use PFCs for the eligible construction and financing costs of the TMP. It is expected that when the new application is approved, the Authority's collection authority will extend through or beyond the term of the 2021 Bonds. The Authority estimates that approximately $537 million of project costs for the TMP are PFC-eligible, which exceeds the Authority's PFC financing capacity. A PFC of $4.50 per passenger is projected to support $345 million in TMP project costs, consisting of $70 million in PFC pay-as-you-go (paygo) funding and $275 million in bond-funded project costs. If such application is approved, the Authority intends to designate such approved PFC revenues to the payment of a portion of the debt service on the Bonds. There can be no assurance that the FAA will approve the Authority's application with respect to eligible TMP costs. Pending FAA approval of this PFC application, the Authority will finance project costs with proceeds of the 2021 Bonds and, upon receipt of FAA approval to apply such PFC revenues to TMP costs, will designate a portion of such PFC revenues as PFCs Available for Debt Service as needed and to the extent projected in the Report of the Airport Consultant attached as Appendix B to this Official Statement (the "Report") and deposit them to the Debt Service Fund. The projections set forth in the Report are based on certain assumptions, which assumptions may be revised by the Authority from time to time.

CFC Revenues

On March 1, 2011, the Authority began collecting customer facilities charges ("CFCs") from all rental car concessionaires that operate at the Airport at a rate of $3.00 to each on-airport rental car concessionaire customer on a per transaction day basis, not to exceed seven transaction days. The CFC rate was increased to $5.50 effective November 1, 2018 and to $6.00 effective February 1, 2020. Also, at the request of the rental car companies, in April 2020, the Authority raised the cap on the number of days of collection from seven to 30 . CFCs may be used to pay, or reimburse the Authority for its direct and indirect costs and expenses of financing, designing, constructing, operating, and maintaining facilities utilized by rental companies, and facilities to be rehabilitated, modified, or improved to accommodate rental car-related facilities at the Airport, including capital costs and debt service associated with improvements to the rental car portion of the garage and related facilities, or for any rental car related purpose the Authority determines is a reasonable use of such funds.

Through 2016, CFC revenues were used for operating expenses, debt service, and capital expenditures for facilities and assets utilized in rental car operations net of amounts already being collected from the rental car operators. Beginning in 2017, CFCs were set aside to pay for the rental car related costs associated with the TMP. CFCs will be used to pay for rental car-related TMP project costs on both a paygo and leveraged basis with the first use of CFCs to pay debt service on Bonds beginning at DBO. Beginning at DBO, CFC revenues in excess of allocable debt service will be used to pay the pro rata share of operating and maintenance expenses, fund a CFC renewal and replacement reserve, and fund a CFC deficiency reserve up to one year's principal and interest. All remaining CFCs will be deposited into the CFC Surplus Account to be available to fund other allocable operating expense and capital improvements and/or retire debt. See APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT – FINANCIAL ANALYSIS – FRAMEWORK FOR FINANCIAL OPERATIONS – Customer Facility Charge Program and Rental Car Agreements."

The following table shows the annual CFC revenues of the Authority for the past five years:

Year	CFC Revenues
2016	$4,990,737
2017	4,893,987
2018	5,928,821
2019	9,536,624
2020	4,585,923

The Master Indenture permits the Authority to pledge all or a portion of the proceeds of CFCs toward the payment of debt service on the Bonds (including future series of Bonds), a separate issue of obligations secured solely by CFCs, or on subordinate obligations issued under the Master Indenture. See APPENDIX C – "FORM OF MASTER INDENTURE." The Authority intends to use CFC revenues as a pay as you go source of revenues and, following completion of the TMP, to pledge a portion of its CFC revenues to pay debt service on the Bonds as Other Pledged Revenues as needed and to the extent projected in the Report.

Pennsylvania Race Horse Development and Gaming Act – Gaming Revenues

The Authority is a designated funding recipient under the Pennsylvania Race Horse Development and Gaming Act adopted by the Commonwealth in 2004 and amended in 2019 (as it may be further amended from time to time, the "Gaming Act"). The Gaming Act legalized slot machine parlors and table games in race tracks and standalone facilities. During the past five years, the Authority has received the following annual gaming revenues from the Commonwealth under the Gaming Act (the funds received by the Authority under the Gaming Act are referred to hereinafter as the "Gaming Revenues"), to be used for development and related projects:

Year	Gaming Revenues
2016	$12,400,000
2017	8,000,000
2018	8,000,000
2019	12,400,000
2020	12,400,000

The Authority expects to continue to receive payments of $12,400,000 annually for so long as it continues to be a recipient under the Gaming Act. However, there can be no assurance that the Gaming Act will not be amended in the future to reduce or eliminate payments of such revenues to the Authority. The Authority intends to use Gaming Revenues as a pay as you go source of revenues and, following completion of the TMP, to pledge a portion of its Gaming Revenues to pay debt service on the Bonds as Other Pledged Revenues as needed and to the extent projected in the Report. The projections set forth in the Report are based on certain assumptions, which assumptions may be revised by the Authority from time to time.

Gaming Revenues are excluded from the definition of Revenues in the Master Indenture, except to the extent designated by the Authority in any Fiscal Year as Other Pledged Revenues and deposited to the Debt Service Fund, and unless so designated and deposited, are not pledged to pay debt service on the Bonds. The Authority currently expects to continue to designate a portion of annual Gaming Revenues as Other Pledged Revenues in the future. See "OUTSTANDING DEBT OF THE AUTHORITY" herein. In the past, and prior to the effective date of the Master Indenture, the Authority has deposited a portion of the annual Gaming Revenues in the Revenue Fund as a credit to the airline rates and charges.

Natural Gas Revenues

The Authority entered into an Oil and Gas Lease (the "Gas Lease") with CNX Gas Company ("CNX") on February 22, 2013. Pursuant to the terms of the Gas Lease, the Authority received an upfront payment of approximately $45,100,000 for exclusive exploration and drilling rights at the Airport and the Allegheny County Airport. In February 2020, CNX terminated the lease as to Allegheny County Airport. In addition, the Authority receives surface rent lease payments and ongoing royalty payments. The royalty payments are equal to 18% of the gross revenues generated by CNX from the sale of minerals derived from its drilling operations ("Natural Gas

Revenues"). Since the first well became operable in 2015, surface rentals and annual royalty payments made to the Authority by CNX ("Natural Gas Revenues") have been as follows:

Year	Amount
2016	$4,215,456
2017	16,279,511
2018	17,649,340
2019	10,121,571
2020	5,559,879

The term of the Gas Lease is five years, with the term extended automatically from year to year as long as gas is being produced in paying quantities. To date, two well pads with multiple wells have been completed at the Airport. While the Authority has received royalties on an ongoing basis under the Gas Lease, the amount of royalties has been decreasing over the past two years but has leveled off since February 2021. There can be no assurance that CNX will continue operations at the Airport, or that other companies active in the oil and gas business will be interested in obtaining rights at the Airport. Decisions regarding continued drilling, as well as the amount and frequency of royalties, are made based on market conditions relating to fluctuations in the price of oil, gas and other hydrocarbons on the open market and other various factors, and are not in the control of the Authority. Accordingly, there can be no assurance that the Authority will continue to receive royalties under the Gas Lease or that such royalties will remain at current annual levels.

In the past, the Authority has deposited a portion of the annual Natural Gas Revenues in the Revenue Fund as a credit to the airline rates and charges. Provided royalty revenues continue without substantial further reduction, the Authority currently expects to continue to do so in the future by designating a portion of annual Natural Gas Revenues as Other Pledged Revenues. Revenues from the Gas Lease are excluded from the definition of Revenues in the Master Indenture, except to the extent designated by the Authority in any Fiscal Year as Other Pledged Revenues and deposited to the Debt Service Fund, and unless so designated and deposited, are not pledged to pay debt service on the Bonds.

Grant Revenues

As discussed above under "IMPACT OF COVID-19 ON THE AIRPORT", the Authority was awarded approximately $36.2 million in grant funds under the CARES Act, of which $10.7 million was applied in 2020 to partially offset reductions in revenue caused by the pandemic. The Authority was awarded an additional $10.6 million under CRRSA, of which $1.0 million was allocated to provide concessionaire relief. The Authority was also awarded an additional $35.9 million pursuant to ARPA, including $4.0 million for concessionaire relief. See "IMPACT OF COVID-19 ON THE AIRPORT" above for a discussion of the Authority's anticipated use of such grant funds.

Pension and Other Post-Employment Benefits

The Authority's Pension Obligations. The County sponsors the Allegheny County Employees' Retirement System (the "Retirement System"), a single-employer defined-benefit pension plan that covers substantially all employees of the County, including substantially all Authority employees. As a component unit of the County, the Authority applies the cost-sharing pension plan accounting and reporting requirements for their stand-alone financial reports as required by GASB. Benefit and contribution provisions for the Retirement System are determined under statutes enacted by the General Assembly of the Commonwealth of Pennsylvania. The Retirement System Board (Board) administers the Retirement System.

The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the plan. A copy of the report may be obtained by writing to: Allegheny County Employees' Retirement System, 106 County Office Building, 542 Forbes Avenue, Pittsburgh, PA 15219. The report may also be obtained online at www.alleghenycounty.us/retirement.

Beginning in 2014, Authority employees were required to contribute 9.0% of covered compensation effective December 28, 2014 through December 31, 2017. Effective January 1, 2018 the employee contribution rate increased to 9.5% of covered compensation, and the employee contribution rate increased again to 10.0% of covered compensation effective January 1, 2019. Employee contributions are matched equally by the County, as prescribed by the Second Class County Code of the Commonwealth of Pennsylvania.

The annual required contribution for the current year was determined as part of an actuarial valuation as of January 1, 2019, and are expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. For the years ended December 31, 2020 and 2019, contributions to the pension plan from the Authority were $2,946,664 and $3,104,246 (or 10.0% and 10.0% of covered payroll), respectively. The Authority contributed all required amounts for the years ended December 31, 2020 and 2019.

At December 31, 2020 and 2019, the Authority reported a liability of $127,357,162 and $98,796,640, respectively, for its proportionate share of the net pension liability. This is consistent with the increase in net pension liability of the Retirement System as a whole from $1.2 billion in 2019 to $1.7 billion in 2020, which, according to the County's Consolidated Annual Financial Report for the fiscal year ended December 31, 2020, related primarily to a decrease in the discount rate applied due to a declining interest rate environment and continued increases in benefit payments to retirees in excess of total contributions. The net pension liability was measured as of December 31, 2020 and 2019, respectively, and the total pension liability used to calculate the net pension liability was determined by actuarial valuations as of January 1, 2020 and 2019, rolled forward to the measurement date. At December 31, 2020, the Authority's proportion was 7.184%, which was a decrease of 0.432% from its proportion measured as of December 31, 2019.

For the years ended December 31, 2020 and 2019, the Authority recognized pension expense of $17,626,127 and $12,046,590, respectively. This expense is primarily the result of the continued application of GASB Statement No. 68, Accounting and Financial Reporting for Pensions, as discussed above under "FINANCIAL INFORMATION -- Management's Discussion of Recent Financial Results".

Other Postemployment Benefits (OPEB). *T*he Authority provides benefits through the Authority's Postemployment Medical Benefits Plan (the "OPEB Plan") which is a single-employer defined benefit OPEB plan administered by the Authority. The OPEB Plan provides reimbursement for medical benefits to eligible firefighters hired before May 1, 2005 and their spouses. Benefits are provided upon the retiree's date of retirement. Benefits are provided through a third-party insurer, and the cost of the benefits is split between the OPEB Plan and the retiree. The Authority covers 62.0% of the premiums at age 50, which increases 3.0% each year until the age of 65 when the retiree becomes eligible for Medicare and the benefits are terminated. Payments to the retirees are made on a reimbursement basis.

The Authority's net OPEB liability was measured using an actuarial valuation as of December 31, 2019 for the year ended December 31, 2020, and was determined not to be material to the Authority's financial statements.

Additional information on the Authority's OPEB obligations is contained in Note 9 of the Authority's audited financial statements which are included as APPENDIX A to this Official Statement.

AGREEMENTS WITH THE AIRLINES

The Airline Operating Agreements

The Authority is a party to Airline Operating Agreements and Terminal Building Leases with passenger airlines relating to the use of the Airport and the establishment of Airline Fees and Charges (the "Airline Operating Agreements"). As of the date of this Official Statement, the following airlines have signed the new amended and extended Airline Operating Agreements: Alaska Airlines, American Airlines, Delta Airlines, Southwest Airlines, Spirit Airlines and United Airlines (the airlines which have executed and delivered an Airline Operating Agreement are referred to as the "Signatory Airlines"). These airlines and their affiliates accounted for approximately 91% of the passenger market share at the Airport in 2020 and approximately 90% in 2019. Affiliates of the carriers referred to above have signed Affiliate Airline Operating Agreements with the Authority. Airlines operating at the Airport which are not Signatory Airlines must execute and deliver a Non-Signatory Agreement with the Authority. The Signatory Airlines lease and/or use the jet gates at the Airport's Airside Terminal. Such non-signatory airlines pay 120% of the landing fees and gate and terminal lease rates paid by the Signatory Airlines. The Airline Operating Agreements are substantially identical except for provisions relating to the Leased Premises and assigned aircraft parking positions for each Signatory Airline.

The Airline Operating Agreements became effective January 1, 2020 and were originally scheduled to expire on December 31, 2021, but have been amended and extended so that they expire (unless sooner terminated pursuant to their terms) on December 31, 2028 with an option to extend for an additional three years upon mutual agreement. The new Airline Operating Agreements provide that the aggregate of Airline Fees and Charges payable by the Signatory Airlines, together with other revenues required to be deposited by the Authority into the Revenue Fund (including Non-Airline Revenues) for each Fiscal Year, generates sufficient Airport System Revenues in the airline-supported cost centers to operate on a break-even basis after paying all Costs of such cost centers, including the satisfaction of all of the Authority's obligations to make all deposits and payments required under the Master Indenture through such date, plus produce annual discretionary funding for Airport System capital improvements or other lawful purposes from (1) a required deposit to the Airport System Capital Fund and (2) a Concession Incentive Fee. Signatory Airlines are also obligated to pay certain additional charges to recover costs associated with fit-outs to their ticket counters and aircraft parking (Ramp Fees). In addition, American and Southwest Airlines pay a fee prior to DBO for the Special Automated Baggage System on the north end of the existing landside terminal and airside terminal (excluding tunnels) (consisting of allocable rent, O&M Expenses, and debt service) while the other airlines pay allocable O&M Expenses for the baggage system on the south end of the terminal. Airlines also pay Facility Fees for the use of the common use gates, ticket counters, and associated facilities. There are also project controls set forth in the Airline Operating Agreements pertaining to the TMP as described above under "THE TERMINAL MODERNIZATION PROGRAM."

Under the Airline Operating Agreements, the number of cost centers used to derive airline rates and charges have been significantly streamlined into Airfield, Terminal, and ACAA Cost Centers for the Airport plus Allegheny County Airport. Airline-supported cost centers are the Airfield and Terminal. The new Airfield Cost Center includes runways, taxiways, safety areas, infield areas, landing and navigational aids, airfield service roads, fencing, buffer areas, clear zones, fire and crash rescue support facilities, aircraft fuel farm and distribution system, hangar and field support areas, and military areas. The new Terminal Cost Center includes the passenger terminals, aircraft parking areas serving the terminal, roadways, and all associated ground transportation facilities (including parking and rental car facilities). The new ACAA Cost Center encompasses all other areas at the Airport, which generally comprise cargo and commercial development areas at the Airport. The first $600,000 per year (escalated with inflation) of surpluses or deficits from the Allegheny County Airport cost center will be credited to or included in the airline landing fee rate base. The remainder will be credited to or the responsibility of the Authority. The Allegheny County Airport generated a surplus of $35,000 in 2018, was revenue neutral in 2019, and generated a surplus of $266,000 in 2020 in part due to an allocation of $158,000 in CARES Act grants.

The Airline Operating Agreements provide for the rental of space and the use of certain facilities by the Signatory Airlines, the establishment of cost accounting centers, and the periodic adjustment of the rentals, fees, and charges to be paid by the Signatory Airlines as determined by the costs and expenses associated with the cost centers as defined in the agreements. The Airline Operating Agreements also (1) grant certain rights and privileges to airlines, (2) provide for the timing and manner of required payments of rates and charges, and (3) set forth other applicable operating conditions and requirements at the Airport.

Under the Airline Operating Agreements, both Landing Fees and Terminal Rentals are each calculated according to "cost center residual cost" formulas, under which Non-Airline Revenues are credited against certain defined costs to determine the net cost to be paid by the Signatory Airlines in each cost center. The costs defined in the Airline Operating Agreements include Operation and Maintenance Expenses, debt service, and other fund deposit requirements as required under the Indenture allocable to the respective Cost Centers, including the Coverage Requirement and O&M Reserve Requirement.

Signatory Airlines are also obligated to pay certain additional charges to recover costs associated with fit-outs to their ticket counters and aircraft parking (Ramp Fees). In addition, prior to DBO, O&M Expenses, debt service and certain rents related to the baggage systems are allocated among its users. Airlines also pay Facility Fees for the use of the common use gates, ticket counters, and associated facilities.

Signatory Airline rentals, fees, and charges are calculated to ensure that the Airport System generates sufficient Airport System Revenues in the airline-supported cost centers to operate on a revenue neutral basis after paying all Costs of such cost centers (as defined in the Airline Operating Agreements). Additionally, annual discretionary funding for Airport System capital improvements or other lawful purposes from (1) a required deposit to the Airport System Capital Fund and (2) a Concession Incentive Fee equal to 6% of nonairline concession revenues. The Concession Incentive Fee is drawn from news and gifts, retail, food, beverage, parking, rental car, ground transportation (such as taxis, limousines, and transportation network companies), advertising, ground handling, fuel sales, and other permits or licenses, but excluding CFC Revenues. In addition, pre-DBO rates will fund the required increase in the amount to be on deposit in the Coverage Account prior to the opening of the TMP (the Coverage Requirement). Through the residual ratemaking, the Concession Incentive Fee will flow through to the Airport System Capital Fund.

Certain aspects of the residual ratemaking methodology will differ during the pre-DBO and post-DBO periods as follows. The annual required deposit into the Airport System Capital Fund of $9.7 million per year (for both the Terminal and Airfield) that commenced January 1, 2021 will increase annually after 2021 by the greater of 3% or the change in the Consumer Price Index. This deposit requirement will be reset at $5 million per year in 2025 (the first full year after DBO), and will increase annually after 2025 by the greater of 3% or the change in the Consumer Price Index, reflecting the opening of the new terminal facilities and the associated reduced repair and rehabilitation requirements of such facilities. In addition, the Airport Operating Agreements provide for funding the incremental amount of the Coverage Requirement from pre-DBO terminal rentals net of amounts currently on deposit that total approximately $16.3 million.

The new Airline Operating Agreements provide for Signatory Airline approval for up to $1.43 billion in TMP project costs as well as $90 million for Airside Renovations. If the Authority funds any such increase in costs from sources that will not increase Airline Fees and Charges (including Other Authority Revenues, additional grants, PFCs, foundation support, or Authority pay-as-you-go contributions), Signatory Airline approval of the cost increase is not required. However, if the Authority proposes to include some or all of the cost increase in the Airline Fees and Charges, and the Authority and the Signatory Airlines cannot reach an agreement on a "Revised Project Cost" to replace the Estimated Project Cost, the Authority must conduct a Majority In Interest ("MII") vote among the Signatory Airlines to approve or reject the cost increase. If an MII disapproves of such cost increases, then the Signatory Airlines must collaborate with the Authority on an alternative course of action, which may include major design changes, changes in facility requirements, or a phased approach to construction. There are also certain procedures regarding project cost controls set forth in the AOA pertaining to the TMP as described in the Report of the Airport Consultant attached hereto as Appendix B. See APPENDIX B – "REPORT OF THE AIRPORT CONSULTANT – Terminal Modernization Program – TMP Project Governance."

The terms "Airline Fees and Charges," "Non-Airline Revenues," "Cost Centers," "Costs," "Concession Incentive Fee," "Terminal Area," and "Airfield Area" are defined in the Airline Operating Agreements. See APPENDIX D - "FORM OF AIRLINE OPERATING AGREEMENT."

FUTURE AIRPORT DEVELOPMENT PLANS

Other Capital Improvements

In addition to the TMP, Airside Terminal Renovations and Airline Fit-outs, the Authority has developed a 2021 Capital Budget and a 2021-2030 Capital Improvement Program (collectively, the "CIP") for the Airport System. The CIP is a multi-year plan of major capital projects, linked to the Authority's strategic goals, that provides a roadmap to implement projects, including targeted completion dates, budgets, and a preliminary funding plan. The projects are derived from the Authority's master plan processes and are developed to address passenger safety, security, and passenger experience, as well as to ensure the continued availability of existing facilities and to develop improvements necessary to meet the ongoing demands for air service to the Pittsburgh region. The table on the following page shows the estimated expenditures by year and sources of funds for the CIP, including amounts spent through 2020 on the TMP.

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Capital Improvement Program Expenditures and Sources of Funds by Year

(for the 12 months ending December 31; numbers in thousands except as noted)

CIP PROJECTS BY YEAR OF EXPENDITURE	Total	2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028	2029	2030
PIT												
Terminal Modernization Program												
Terminal	$1,025,941	$94,766	$85,597	$229,791	$384,280	$231,507	$-	$-	$-	$-	$-	$-
Park/RAC	320,398	29,595	26,732	71,763	120,009	72,299	-	-	-	-	-	-
Subtotal - TMP	1,346,339	124,362	112,328	301,554	504,289	303,806	-	-	-	-	-	-
Airside Renovations/Airline Fit-outs	104,932	-	-	47,219	47,219	10,493	-	-	-	-	-	-
Landing	344,463	-	10,238	18,320	33,750	37,500	30,520	12,400	136,334	20,000	26,900	18,500
Terminal - non-TMP	75,140	-	8,495	850	10,020	8,075	4,950	4,950	4,950	4,950	8,950	18,950
Ramp	1,250	-	1,250	-	-	-	-	-	-	-	-	-
Park/RAC - non-TMP	3,777	-	3,377	-	-	-	-	-	-	-	-	400
Roadways	500	-	-	-	-	-	-	-	-	-	-	500
Hangar and Field Support	15,840	-	240	3,600	-	-	-	-	-	10,500	800	700
CIA	46,135	-	8,533	9,064	6,900	8,750	12,888	-	-	-	-	-
Security	3,752	-	121	131	3,000	-	-	500	-	-	-	-
General Services	29,809	-	5,639	6,120	4,000	4,000	5,000	5,000	50	-	-	-
Cargo	64,099	-	9,003	32,563	18,163	4,369	-	-	-	-	-	-
ARFF	1,750	-	-	-	-	-	-	950	800	-	-	-
Admin	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - PIT	$2,037,785	$124,362	$159,224	$419,423	$627,342	$376,993	$53,358	$23,800	$142,134	$35,450	$36,650	$39,050
AGC	79,108	-	2,681	12,350	11,455	10,580	11,090	10,450	7,074	6,128	4,300	3,000
Total CIP	**$2,116,893**	**$124,362**	**$161,906**	**$431,773**	**$638,797**	**$387,573**	**$64,448**	**$34,250**	**$149,208**	**$41,578**	**$40,950**	**$42,050**
SOURCES OF FUNDS												
Grants												
AIP - Entitlement	$45,891	$-	$3,652	$4,454	$7,629	$1,773	$3,932	$1,000	$15,150	$4,150	$4,000	$150
Federal Discretionary	214,900	-	3,021	21,046	22,161	12,662	11,623	11,578	87,280	16,050	14,555	14,925
State - PennDOT	67,243	-	3,068	9,786	10,394	18,098	12,415	5,193	3,991	1,089	998	2,213
Other Grants	48,724	-	10,747	14,051	12,876	2,000	9,050	-	-	-	-	-
Bonds												
Revenue-Supported	926,165	77,206	69,736	227,860	353,722	197,642	-	-	-	-	-	-
CIP GARBs	16,500	-	-	-	-	10,250	6,250	-	-	-	-	-
PFC-Supported	275,000	25,402	22,944	61,595	103,005	62,055	-	-	-	-	-	-
PFC Paygo / TMP	78,165	7,220	6,521	17,507	29,278	17,638	-	-	-	-	-	-
PFC Paygo / CIP	-	-	-	-	-	-	-	-	-	-	-	-
CFC-Supported	54,384	5,023	4,537	12,181	20,370	12,272	-	-	-	-	-	-
CFC pay-as-you-go	61,382	5,670	5,121	13,748	22,991	13,851	-	-	-	-	-	-
CARES	20,570	1,900	1,716	4,607	7,705	4,642	-	-	-	-	-	-
BIOS/TIF	16,486	-	1,997	1,849	5,340	6,850	450	-	-	-	-	-
Gaming Revenues	55,997	1,940	5,637	24,359	13,164	9,008	1,888	-	-	-	-	-
Equipment / Capital Outlay	30,900	-	3,455	3,135	3,000	3,225	3,320	3,119	3,809	4,200	2,800	838
Natural Gas Revenues	75,409	-	9,528	5,631	6,550	5,000	4,250	3,000	13,500	10,000	8,000	9,950
Airport System Capital Fund	129,178	-	10,225	9,963	20,611	10,608	11,270	10,361	25,479	6,089	10,598	13,975
Total	**$2,116,893**	**$124,362**	**$161,906**	**$431,773**	**$638,797**	**$387,573**	**$64,448**	**$34,250**	**$149,208**	**$41,578**	**$40,950**	**$42,050**

A summary of the projects in the CIP, their estimated costs, and the funding plan are presented in Table 14 contained in the Report of the Airport Consultant included as APPENDIX B hereto and in the Report of the Airport Consultant included as APPENDIX B hereto under the caption "2021-2030 CAPITAL IMPROVEMENT PROGRAM".

The CIP includes certain estimated costs relating to construction of the stormwater deicing treatment facility ("Treatment Facility") described herein under "THE AIRPORT – Environmental Matters." The total cost to construct the Treatment Facility is estimated to be between $46.7 million and $74.5 million, depending on the effluent limits and other conditions in the final National Pollutant Discharge Elimination System ("NPDES") permit renewal. The Authority expects that approximately 50% of the costs of constructing the Treatment Facility would be financed with state grant funds, with the remainder expecting to be funded with discretionary revenues of the Authority and proceeds of Additional Bonds issued under the Master Indenture. In the CIP (see table above), the potential cost of this facility was included at $46 million with $16.5 million in Additional Bonds.

One of the other elements identified in the 2017 Airport master plan was a recommendation to close the southern parallel runway, which is no longer needed with the de-hubbing of the Airport in 2004. The Authority is working with the FAA on a plan to decommission either the southern parallel runway or the center runway. It is uncertain at this time if the FAA will approve of such a closure or the potential costs of doing so; however, preliminary estimates have been included in the CIP for this project. If the runway is not closed, the cost to rehabilitate it would be slightly more than the estimated cost to close it.

AIRLINE INFORMATION

Certain airlines operating at the Airport (or their respective parent corporations), including certain of the Signatory Airlines, are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended, and file reports and other information with the SEC. Certain information, including financial information, as of particular dates is disclosed in certain reports and statements filed with the SEC. Such reports and statements can be inspected in the Public Reference Room of the SEC at 100 F Street, N.E., Washington, DC 20549, and copies of those reports and statements can be obtained from the Public Reference Section of the SEC at the above address at prescribed rates. The SEC also maintains a web site at http://www.sec.gov containing reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. In addition, each airline operating at the Airport is required to file periodic reports of financial and operating statistics with the United States Department of Transportation ("USDOT"). Those reports can be inspected at the Office of Airline Information, Bureau of Transportation Statistics, Department of Transportation, 1200 New Jersey Avenue, S.E., Washington, DC 20590, and copies of those reports can be obtained from the USDOT at prescribed rates. These USDOT reports are also available at the USDOT, Bureau of Transportation Statistics website at https://www.bts.dot.gov.

The Authority undertakes no responsibility for and makes no representations as to the accuracy or completeness of the content of any information appearing on the SEC's or USDOT's websites as described in the preceding paragraph, including, but not limited to, updates of such information or links to other internet sites accessed through the SEC's or USDOT's websites.

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

REPORT OF THE AIRPORT CONSULTANT

The Report of the Airport Consultant (the "Report") dated July 30, 2021 has been prepared by LeighFisher (the "Airport Consultant") in connection with the 2021 Bonds and is reproduced in APPENDIX B to this Official Statement. References made herein to the Report are made to the entire Report, which should be read in its entirety and which contains material information, projections, findings, assumptions, and conclusions concerning the Airport System.

The Report presents certain airline traffic and financial projections for Fiscal Years 2021 through 2028 and sets forth the assumptions upon which the projections are based. The financial projections are based on certain assumptions that were provided by, or reviewed and agreed to by, Authority management. In the opinion of the Airport Consultant, the assumptions set forth in the Report provide a reasonable basis for all projections.

The following table, which has been extracted from the Report, shows the "Base Traffic Recovery Case" (as detailed in the Report) projected Net Revenues, Coverage Amount, Debt Service Requirements on Bonds, and debt service coverage on Bonds and total indebtedness for Fiscal Years 2021 through 2028. The projections indicate compliance with the rate covenant for each Fiscal Year of the projection period.

PROJECTED RATE COVENANT COMPLIANCE
Pittsburgh International Airport
(in thousands, except coverage)
(for the 12 months ending December 31)

	2021	2022	2023	2024	DBO 2025	2026	2027	2028
Net Revenues[1]	$29,745	$22,187	$24,683	$26,359	$76,132	$79,506	$80,038	$79,998
Coverage Amount	-	-	-	-	16,149	16,059	15,965	15,871
Total	$29,745	$22,187	$24,683	$26,359	$92,281	$95,566	$96,003	$95,869
Senior Bonds Debt Service[2]	-	-	-	-	$84,542	$84,548	$84,545	$84,549
Less: PFCs Available for Debt Service	-	-	-	-	(19,945)	(20,311)	(20,683)	(21,064)
Aggregate Annual Debt Service	-	-	-	-	$64,596	$64,237	$63,861	$63,485
Debt Service Coverage	N/A	N/A	N/A	N/A	1.43	1.49	1.50	1.51

1 Includes Other Pledged Revenues.

2 Excludes interest expense on the PNC Line of Credit, which is expected to be paid from proceeds of the 2021 Bonds when issued.

Note: DBO for the TMP is expected to be late 2024 or early 2025; therefore, debt service is capitalized through December 31, 2024.

Sources: Debt service: PFM.
All other: the Authority and LeighFisher.

The Report of the Airport Consultant and the projection of Net Revenues and debt service coverage included therein incorporated assumptions of the debt service on the 2021 Bonds and additional Bonds expected to be issued during the projection period based upon information provided by PFM Financial Advisors LLC ("PFM"), financial advisor to the Authority, in July 2021. PFM's calculations are based upon the assumptions set forth in the Report of the Airport Consultant. PFM has used what it believes are reasonable assumptions to estimate the projected annual debt service on the 2021 Bonds and the additional Bonds to be issued to fund the TMP; however, there can be no assurance that the assumed rates will be achieved or that interest rates will not exceed those used in the assumptions. Several other projections included in the Report of the Airport Consultant, such as projected airline payments per enplaned passenger, rely on the estimated debt service amounts and investors should take into consideration these assumptions when considering the Report of the Airport Consultant.

The Report of the Airport Consultant should be read in its entirety for an understanding of the Report and its underlying assumptions. As noted in the Report of the Airport Consultant, any projections are subject to uncertainties. Inevitably, some of the assumptions used to develop the Report of the Airport Consultant will not be realized and unanticipated events and circumstances may occur. The actual financial results achieved will vary from those in the Report of the Airport Consultant and the variations may be material. The Report of the Airport Consultant is not expected to be updated with final pricing information for the 2021 Bonds. See "CERTAIN INVESTMENT CONSIDERATIONS – FINANCIAL ASSUMPTIONS" and "APPENDIX B - REPORT OF THE AIRPORT CONSULTANT."

CERTAIN INVESTMENT CONSIDERATIONS

The purchase and ownership of the 2021 Bonds involve investment risks and considerations and may not be suitable for all investors. Prospective purchasers of the 2021 Bonds should read this Official Statement, including the Appendices hereto, in its entirety. The factors set forth below, among others, may affect the security for the 2021 Bonds.

In considering the matters set forth in this Official Statement, prospective investors should carefully review all investment considerations set forth throughout this Official Statement and should specifically consider risks associated with the 2021 Bonds. The Authority's ability to derive Net Revenues from operations of the Airport System in amounts sufficient to pay debt service on the 2021 Bonds depends on many factors, many of which are beyond the control of the Authority. These factors include the financial strength of the air transportation industry in general and the financial strength of the airlines and other businesses that operate at the Airport.

COVID-19

See "IMPACT OF COVID-19 PANDEMIC ON THE AUTHORITY" above for risks associated with the 2021 Bonds and the Authority resulting from the COVID-19 pandemic.

Project Costs and Schedule

The estimated costs of, and the projected schedule for, the TMP and other capital projects depend on various sources of funding, and are subject to a number of uncertainties. The ability of the Authority to complete these projects within the current budgets and on the current schedules may be adversely affected by various factors including: (1) estimating errors, (2) design and engineering errors, (3) cost increases because of demand for labor and materials, (4) contractors' difficulty in predicting costs over a lengthy constructions period, (5) the need to estimate costs of unbid project elements, (6) changes to the scope of the projects, (7) delays in contract awards, (8) material and/or labor shortages, (9) delays because of airline operational needs, (10) unforeseen site conditions, (11) adverse weather conditions, (12) contractor defaults, (13) labor disputes, (14) unanticipated levels of inflation, (15) litigation and (16) environmental issues. See "THE TERMINAL MODERNIZATION PROGRAM - Summary of the TMP. No assurance can be given that the costs of the projects will not exceed the current budget for these projects or that the completion will not be delayed beyond the currently projected completion dates. Any schedule delays or cost increases could result in the need to issue additional Bonds or Subordinate Obligations, which, depending on the nature and amount of the change or cost increase, could require additional approval from airlines for certain increased costs. The issuance of additional Bonds or Subordinate Obligations may result in increased costs per enplaned passenger to the airlines. At present, the Authority is unable to estimate the costs associated with each of the risks identified above and the total impact of these risks if such events were to occur. In addition, the Authority may ultimately decide to modify or not proceed with certain capital projects included in the TMP or the CIP, or may proceed with them on a different schedule, resulting in different results than those included in the projections shown in "APPENDIX B - REPORT OF THE AIRPORT CONSULTANT."

Financial Assumptions

The Authority's plan of financing for the TMP is based on a number of financial and activity assumptions, including assumptions relating to: (1) the estimated costs and timing of construction of the TMP and the ability of the Authority to complete construction on the TMP within budget; (2) the projected levels of aviation activity at the Airport; and (3) timing of, and assumptions with respect to the issuance of and interest rates borne by the 2021 Bonds and the required additional Bonds, including access to the capital markets. Although the Authority believes each of these assumptions is based on reasonable judgments, one or more of these assumptions may prove incorrect. The impact of a significant variation of any of the assumptions described above could have a material adverse effect on the plan of financing for the TMP.

The Authority's plan of financing is based upon certain assumptions with respect to growth in aviation at the Airport, in particular in the near-term as traffic recovers from the pandemic. The factors affecting such levels of activity are largely beyond the Authority's control. Origination and destination traffic, which accounts for approximately 98% of passenger activity at the Airport, will be affected to a significant degree by the economic vitality of the Authority and the region. Airport activity will also be affected, to some extent, by each airline's financial capacity and strategic markets, availability of aircraft, cost of aviation fuel and a number of other factors beyond the control of the Authority such as the period of time it takes to recovery from the pandemic.

Force Majeure Events

Events of force majeure, such as extreme weather events and other natural occurrences such as fires and explosions, spills of hazardous substances, strikes and lockouts, government imposed shutdowns or mandatory suspension of services, sabotage, or wars, blockades or riots could adversely affect the Authority's ability to generate Revenues. There is no assurance that such events will not occur while the 2021 Bonds are Outstanding. Although the Authority has attempted to mitigate the risk of loss from many of these occurrences by purchasing commercial property and casualty insurance, no assurance can be given that such insurance will be available in sufficient amounts at a reasonable cost or available at all or that insurers will pay claims in a timely manner, or at all. In addition, neither commercial, property and casualty insurers nor business interruption insurers have been willing to insure against COVID-19 based loss claims arising as a result of the pandemic.

Economic Considerations

The financial performance of the air transportation industry generally correlates with the state of the national economy and the global economy with an exception occurring during the recent COVID-19 pandemic. 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 prolonged weak economic conditions, including those relating to the COVID-19 pandemic, or other national and international fiscal concerns will not have an adverse effect on the air transportation industry.

Factors Affecting the Airline Industry

Air Transportation Industry Factors

The airline industry has historically been highly cyclical and has been characterized by intense competition, high operating and capital costs, and varying demand. Passenger and cargo volumes are highly sensitive to general and localized economic trends, and passenger traffic varies substantially with seasonal travel patterns. After an exceptional period of volatility in the 2000s, the outlook for U.S. carrier profitability in the near-term had been positive, with the U.S. airline industry having posted its ninth consecutive year of profitability in 2019. However, recent events regarding COVID-19 (discussed below under "—Aviation Security, Health and Safety Concerns") have been adversely affecting airlines and the travel industry disproportionate to other sectors of the economy. However, U.S. carriers have continued to exercise significant capacity discipline in recent years by eliminating unprofitable routes and redundant services, reducing service at smaller hubs and in less profitable markets, beginning to grow operations strategically, often serving key hubs, and focusing on the use of right-sized aircraft to serve markets. In addition, an increase in fees for ancillary services, such as checked baggage, flight reservation and cancellation, early boarding, seat selection and food service has also helped to increase revenues. Further, Federal grants have played a large role in mitigating, somewhat, the impact of COVID-19 on the airlines. After seven years of profitable operations by the major U.S. airlines, there is cautious optimism that the U.S. airline industry may have moved to a cycle of sustainable profits, but the profitability of the airline industry, nonetheless, may still fluctuate dramatically from quarter to quarter and from year to year, even in the absence of catastrophic events such as the terrorist attacks of September 11, 2001 and the economic recession of 2008 and 2009 and, as noted above, the effects of COVID-19.

Further, because of the discretionary nature of business and personal travel spending, airline passenger traffic and revenues are heavily influenced by a variety of factors, including (i) the strength of the U.S. economy and other regional and world economies, (ii) the cost and availability of labor, fuel, aircraft and insurance, (iii) international trade, (iv) currency values, (v) competitive or partnership considerations, including the effects of airline ticket pricing, (vi) traffic and airport capacity constraints, (vii) governmental regulation, including security regulations and taxes imposed on airlines and passengers, evolving federal restrictions on travel to the United States from certain countries, and maintenance and environmental requirements, (viii) passenger demand for air travel, including the availability of business travel substitutes such as teleconferencing, videoconferencing and web-casting, (ix) strikes and other union activities, (x) disruptions caused by airline accidents, criminal incidents, acts of war or terrorism, outbreaks of disease and weather and natural disasters, and (xi) disruptions caused by government policies or actions, such as a federal government shutdown.

Cost of Aviation Fuel

Airline profitability is significantly affected by the price of aviation fuel. According to Airlines for America, fuel is the second largest single cost component for most airline operations, and therefore an important and uncertain determinant of an air carrier's operating economics. Fuel prices continue to be susceptible to, among other factors: political unrest in various parts of the world (particularly in the oil-producing nations in the Middle East and North Africa); Organization of Petroleum Exporting Countries policy; the rapid growth of economies such as China and India and resulting demand for oil-based fuels; the levels of inventory carried by industries; the amounts of reserves maintained by governments; the amount and availability of new sources of oil (e.g., U.S. fracking operations); disruptions to production and refining facilities; and weather.

The cost of aviation fuel has fluctuated in the past in response to changes in demand or and supply of oil worldwide. Historically, significant fluctuations and prolonged increases in the cost of aviation fuel have adversely affected air transportation industry profitability, causing airlines to reduce capacity, fleet and personnel; to invest in new, more fuel efficient aircraft and equipment; and to increase airfares and institute fuel, checked baggage, and other extra surcharges, all of which may reduce demand for air travel. 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 a number of airports in the eastern United States.

Many airlines engage in or have engaged in fuel hedging – purchasing fuel in advance at a fixed price through derivative contracts – to help manage the risk of future increases in fuel costs. However, there can be no assurance that any fuel hedging contract can provide any particular level of protection from volatile fuel prices. One carrier has even purchased its own refinery in order to better manage its fuel costs.

Aviation Security, Health and Safety 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.

Safety concerns in the aftermath of the terrorist attacks on September 11, 2001 were largely responsible for the steep decline in airline travel nationwide in 2002. Since 2001, government agencies, airlines and airport operators have upgraded security measures to guard against future terrorist incidents and maintain confidence in the safety of airline travel. These measures include strengthened aircraft cockpit doors, changed flight crew procedures, increased presence of armed federal air marshals, federalization of airport security functions under the TSA, more effective dissemination of information about threats, more intensive screening of passengers, baggage and cargo, and deployment of new screening technologies. The airlines and the federal government were primarily responsible for, and bore most of the capital costs associated with, implementing the new security measures. No assurance can be given that these precautions will be successful. Also, 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.

Public health and safety concerns have also affected air travel demand from time to time, as evidenced by the COVID-19 pandemic as discussed herein. The COVID-19 pandemic has had and likely will continue to have a material adverse effects on passenger traffic and Authority operations and financial performance. See "IMPACT OF COVID-19 ON THE AIRPORT" above. Future outbreaks or pandemics may lead to a decrease in passenger traffic, which in turn could cause a decrease in passenger activity at the Airport and a corresponding decline in revenues.

Following the fatal crashes of two Boeing 737 MAX aircraft that are suspected to have been caused by the malfunction of the aircraft's automated flight control system, all Boeing 737 MAX aircraft were grounded in March 2019. Among North American airlines, Air Canada, American, Southwest and United are being affected. At the time of the grounding, Boeing 737 MAX aircraft accounted for approximately 1.5% of U.S. airline seat capacity and less than 1.0% of seat capacity at the Airport. On November 18, 2020, the FAA issued an order formally rescinding the grounding of the Boeing 737 MAX aircraft, clearing the way for its return to service. On December 29, 2020, the Boeing MAX 737 aircraft returned to providing passenger service in the United States. On April 9, 2021, Boeing warned airlines of a new possible electrical insulation fault in the recent production of some Boeing 737 MAX planes. The top three Boeing 737 MAX operators (Southwest Airlines, American Airlines and United Airlines) removed a total of 63 jets from service following the notice from Boeing. At the FAA's request, Boeing suppled analysis and documentation showing that numerous Boeing 737 MAX subsystems would not be affected by electrical grounding issues. The FAA reviewed Boeing's analysis and approved the service bulletins sent to airlines on May 13, 2021.

Structural Changes in the Travel Market

Many factors have combined to alter consumer travel patterns. 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 new 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. Additionally, consumers have become more price-sensitive. Efforts of airlines to stimulate traffic by heavily discounting fares have changed consumer expectations regarding airfares. Consumers have come to expect extraordinarily low fares. In addition, the availability of fully transparent price information on the internet now allows quick and easy comparison shopping, which has changed consumer purchasing habits. Consumers have shifted from purchasing paper tickets from travel agencies or airline ticketing offices to purchasing electronic tickets over the internet. This has made pricing and marketing even more competitive in the U.S. airline industry. Finally, smaller corporate travel budgets, combined with the higher time costs of travel and the impacts of the COVID-19 pandemic, have made business customers more amenable to communications substitutes such as teleconferencing, video-conferencing and web-based meetings.

Industry Workforce Shortages

Pilot shortage is an industry-wide issue, and especially so for smaller regional airlines. There are several causes for the pilot shortage that affect all airlines. Congress changed duty time rules in 2010 to mitigate pilot fatigue, which required airlines to increase pilot staff. Beginning in 2013, first officers flying for commercial airlines were required to have at least 1,500 hours of flight time, instead of the 250 hours previously required. Other factors include an aging pilot workforce and fewer new pilots coming out of the military. Further, as passenger demand increases, the major air carriers are anticipated to need additional pilots, and are generally able to hire pilots away from regional airlines. As a result, small regional airlines have a particularly difficult time hiring qualified new pilots, despite increased incentives. The shortage of pilots available to regional airlines may result in reduced service to some smaller U.S. markets.

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

Effect of Bankruptcy on Airline Operating Agreements

In the event of bankruptcy proceedings involving one or more of the Signatory Airlines the debtor or its bankruptcy trustee must determine within a time period determined by the court whether to assume or reject the applicable Airline Operating 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 would give rise to an unsecured claim of the Authority for damages, the amount of which in the case of a lease is limited by the Bankruptcy Code. However, the amounts unpaid as a result of a rejection of an Airline Operating Agreement by a Signatory Airline in bankruptcy would be passed on to the remaining Signatory Airlines under their Airline Operating Agreements. All Signatory Airlines are current on their payments to the Authority under the Airline Operating Agreements.

Airline Consolidation

In response to competitive pressures and other factors, the U.S. airline industry has consolidated through mergers and acquisitions, significantly reducing the number of major airlines operating in the United States. For example, several airlines merged or consolidated, including: US Airways and American Airlines; Delta and Northwest; Republic Airways Holdings, Inc., Midwest Airlines and Frontier Airlines; United and Continental; and Southwest Airlines and AirTran Airways. . In addition, many of the larger U.S. airlines are members of alliances with foreign-flag airlines to provide members with many of the same advantages as merged airlines. It is possible the airlines serving the Airport could further consolidate operations through acquisition, merger or alliances. These alliances include marketing, code share sales strategies and scheduling arrangements to facilitate the transfer of passengers between airlines.

Further airline consolidation remains possible. Depending on which airlines serving the Airport merge or join alliances, if any, the result may be fewer flights or decreases in gate utilization by one or more airlines, which could result in a reduction in enplaned passengers. Such a reduction in enplaned passengers could result in reduced Airport revenues, reduced PFC collections and/or increased costs for the other airlines serving the Airport.

Air Service Region

The Airport serves the greater Pittsburgh area and plays the leading role in western Pennsylvania's air service infrastructure. Based upon information provided by USDOT for fiscal years 2019 and 2020, approximately 98% of total passengers (domestic and international) at the Airport began or ended their air travel ("origin-destination" or "O&D" travel) at the Airport.

The high percentage of origin-destination passengers in both the business and leisure markets is in contrast to certain other major airports that are used in large part by airlines as connecting hubs for passengers en route to another point as their final destination. As a result of this traffic base, overall activity levels at the Airport are less vulnerable to fluctuations in connecting traffic resulting from route restructuring by individual airlines or other factors affecting particular airlines. Rather, Airport activity levels tend to reflect general economic conditions, regional economic and demographic trends and the economics of the airline industry.

Federal Law Affecting Rates and Charges

Rates and charges for aeronautical use of an airport imposed pursuant to a written agreement between the air carriers operating at an airport and the operator of the airport are generally not subject to federal regulation except for regulations designed to ensure that such rates are not discriminatory. The Airline Operating Agreements between the Authority and the Signatory Airlines set forth a formula for establishing rates and charges for use of the aeronautical facilities at the Airport. Accordingly, the Authority believes that the provisions of the Airline Operating Agreements are consistent with the FAA regulations and the Authority's Grant Assurances, to the extent the same are applicable. The current Airline Operating Agreements expire (unless sooner terminated pursuant to their terms) on December 31, 2028 with an option to extend for an additional three years upon mutual agreement.

Airlines operating at the Airport which do not execute the Airline Operating Agreement are referred to as "Nonsignatory Airlines". Such airlines, as well as other aircraft utilizing the Airport on an itinerant basis, are charged a surcharge equal to 120% of the rates and charges imposed under the Airline Operating Agreement. Such Nonsignatory Airline operations constitute only a small percentage of total operations at the Airport.

For rates and charges not determined pursuant to an agreement, federal aviation law requires, in general, that airport fees be reasonable and nondiscriminatory. In order to receive federal grant funding, all airport generated revenues must be expended for the capital or operating costs of the airport, the local airport system, or other local facilities owned or operated by the airport owner that are directly and substantially related to air transportation of passengers or property. Pursuant to the requirements of the Federal Aviation Administration Authorization Act of 1994, USDOT and FAA have promulgated regulations setting forth an expedited hearing process to be followed in determining the reasonableness of airport rates and charges, and have also promulgated a policy statement (the "Rates and Charges Policy"), which sets forth the standards that USDOT uses in determining the reasonableness of the fees charged to airlines and other aeronautical users.

Future FAA Rules, Regulations or guidelines may limit the Authority's flexibility in negotiating new airline agreements or in setting rates and charges for use of the Airport's airfield and non-airfield facilities. While there are no currently pending proposals to effectuate such changes in Congress or by the FAA or USDOT, there can be no assurance that new proposals will not be forthcoming which could impact Airport financial models. Any new FAA guidelines or any standards promulgated by a court in connection with a dispute could limit the amounts and allocation of costs payable by airlines serving the Airport. Until USDOT promulgates a new policy regarding rates and charges, the guiding principle for determining whether rates and charges established for use of airport assets is the requirement of federal law that such charges be reasonable.

Availability of Funding For Future Airport Development Plans

Passenger Facility Charges

Under the PFC Act, the FAA may authorize a public agency to impose a PFC of up to $4.50 on each eligible passenger of an air carrier enplaned at any commercial service airport controlled by the public agency, subject to certain limitations. PFCs are available to airports to finance certain projects that (i) preserve or enhance capacity, safety or security of the national air transportation system, (ii) reduce noise resulting from an airport, or (iii) furnish opportunities for enhanced competition among air carriers. Under certain circumstances, the FAA grants approval to commence collection of PFCs ("impose only" approval) before approval to spend the PFCs on approved projects ("use" approval) is granted. Approval to both collect and spend PFCs is referred to as an "impose and use" approval.

The Authority's annual PFC revenues for 2016 through 2020 were $16,176,674, $17,794,862, $19,023,229, $18,979,556 and $6,945,191, respectively. PFC revenues do not secure the 2021 Bonds or any other Bonds unless designated by the Authority, at its discretion, as PFCs Available for Debt Service and are deposited to the Debt Service Fund.

No assurance can be given that PFCs will actually be received in the amount or at the time contemplated by the Authority. The amount of actual PFC revenues will vary depending on actual levels of qualified passenger enplanements at the Airport. In addition, the FAA may terminate the Authority's ability to impose PFCs, subject to informal and formal procedural safeguards, if the Authority's PFC revenues are not being used for approved projects in accordance with the FAA's approval, the PFC Act or the regulations promulgated thereunder or the Authority otherwise violates the PFC Act or regulations. The Authority's ability to impose a PFC may also be terminated if the Authority violates certain provisions of the Airport Noise and Capacity Act of 1990 and its implementing regulations. Furthermore, no assurance can be given that the Authority's authority to impose a PFC will not be terminated by the FAA, or that the PFC program will not be modified or restricted by Congress or the FAA so as to reduce PFC revenues available to the Authority.

The Authority has received approvals from the FAA to collect and use PFCs for a total of $566 million in collection authority at the $4.50 level, including $62 million received in December 2019 for the PFC-eligible design costs of the TMP. The Authority's current collection authority extends to January 1, 2034. In the second half of

2021, the Authority intends to submit a new application to collect and use PFCs for the eligible construction and financing costs of the TMP. The Authority estimates that approximately $537 million of project costs for the TMP are PFC-eligible, which exceeds the Authority's PFC financing capacity. A PFC of $4.50 per passenger is projected to support $345 million in TMP project costs, consisting of $70 million in PFC pay-as-you-go (paygo) funding and $275 million in bond-funded project costs. If the new PFC application is approved, the Authority intends to designate such approved PFC revenues to the payment of a portion of the debt service on the Bonds. There can be no assurance that the FAA will approve the application submitted by the Authority with respect to eligible TMP costs. If such application is not approved, the Authority intends to address any shortfall through a number of different means, including but not limited to increases in rates and charges.

Federal Funding; FAA Reauthorization

Federal legislation affects the grant funding that the Airport receives from the FAA, the Airport's PFC collections, and the operational requirements imposed on the Airport. On October 3, 2018, Congress passed a five-year reauthorization bill for the FAA, the FAA Reauthorization Act of 2018, which was signed into law on October 5, 2018 by the President. The FAA Reauthorization Act of 2018, among other things, authorizes the FAA's programs for five federal fiscal years, and increases funding for the Airport Improvement Program ("AIP"). The Airport and Airway Improvement Act of 1982 created the AIP, which is administered by the FAA and funded by the Airport and Airway Trust Fund, which is financed by federal aviation user taxes. The AIP provides federal capital grants to support airport infrastructure, including entitlement grants (determined by formulas based on passenger, cargo, and general aviation activity levels) and discretionary grants (allocated on the basis of specific set-asides and the national priority ranking system). FAA AIP expenditures are subject to congressional appropriation and no assurance can be given that the FAA will receive spending authority. Additionally, the AIP expenditures could be affected by the automatic across-the-board spending cuts, known as sequestration, described below.

As described herein under "FUTURE AIRPORT DEVELOPMENT PLANS – Other Capital Improvements," the Authority expects to undertake projects in its CIP which may be financed in part by AIP grants and other government grants. The Authority is unable to predict the level of available AIP funding it may receive or whether any AIP funding will be received at the time contemplated by the Authority. If there is a reduction in the amount of AIP grants awarded to the Authority, such reduction could (i) increase by a corresponding amount the capital expenditures that the Authority would need to fund from other sources (including operating revenues and Additional Bonds), (ii) result in adjustments to the capital plan, or (iii) extend the timing for completion of certain projects.

Federal funding received by the Authority could also be adversely affected by the implementation of sequestration, a budgetary feature first introduced in the Budget Control Act of 2011 (Pub.L. 112-25) (the "Budget Control Act"). Sequestration refers to automatic spending cuts that occur through the withdrawal of funding for certain government programs. Sequestration could adversely affect FAA and TSA budgets and operations and the availability of certain federal grant funds typically received annually by the Authority, which may cause the FAA or TSA to implement furloughs of its employees and freeze hiring, and may result in flight delays and cancellations. Additionally, the effect of future federal government shutdowns, if any, such as the brief government shutdown that occurred December 22, 2018 to January 25, 2019, is unknown.

Cybersecurity

The Authority, like many other large public and private entities, relies on a large and complex technology environment to conduct its operations, and faces multiple cybersecurity threats including, but not limited to, hacking, phishing, viruses, malware, ransomware and other attacks to its computing and other digital networks and systems (collectively, "Systems Technology"). As a recipient and provider of personal, private or sensitive information, the Authority may be the target of cybersecurity incidents that could result in adverse consequences to the Authority's Systems Technology, requiring a response action to mitigate the consequences. The Authority has cyberinsurance coverage in place with a policy aggregate of $5,000,000 (including a $50,000 retention/deductible).

Cybersecurity incidents could result from unintentional events, or from deliberate attacks by unauthorized entities or individuals attempting to gain access to the Authority's Systems Technology for the purposes of misappropriating assets or information or causing operational disruption or damage. To mitigate the risk of business operations impact and/or damage by cybersecurity incidents or cyber-attacks, the Authority invests in multiple forms of cybersecurity and operational safeguards.

While the Authority's cybersecurity and operational safeguards are periodically tested, no assurance can be given by the Authority that such measures will ensure against other cybersecurity threats and attacks. Cybersecurity breaches could damage the Authority's Systems Technology and cause material disruptions to the Authority's finances or operations. The costs of remedying any such damage or protecting against future attacks could be substantial.

The airlines serving the Airport and other Airport tenants, as well as the FAA and TSA, also face cybersecurity threats that could affect their operations or finances.

Environmental Regulations

The U.S. Environmental Protection Agency (the "EPA") is responsible for regulating air quality and water quality. The Authority is not aware of any releases of pollutants or contaminants at the Airport other than those which are subject to ongoing remediation described in Note No. 1 ("Pollution Remediation Obligations") to the audited financial statements in APPENDIX A hereto. However, there could be other such releases not known to the Authority as of the date of this Official Statement and as described below. The potential exists for additional federal regulation or remediation or federal or state legislation from time to time that may require capital expenditures or changes in operations at the Airport System or could otherwise have an adverse impact on the Authority.

The FAA requires airports to provide aircraft rescue and firefighting services using aqueous film forming foam (AFFF) that contains PFAS (per- and poly fluoroalkyl) compounds. While current formulations use different PFAS compounds, AFFF used at airports in the past contained Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS), two substances that have been widely used in numerous commercial products and which are currently being reviewed by the EPA for designation as hazardous substances. The Authority believes that it is in compliance in all respects with all current regulations governing the use of PFAS.

Climate Change

Numerous scientific studies on global climate change show that, among other effects on the global ecosystem, sea levels will rise, extreme temperatures will become more common and extreme weather events will become more frequent as a result of increasing global temperatures attributable to atmospheric pollution.

The Fourth National Climate Assessment, published by the U.S. Global Change Research Program in November 2018 ("NCA4"), finds that more frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems and social systems over the next 25 to 100 years. NCA4 states that rising temperatures, sea level rise, and changes in extreme events are expected to increasingly disrupt and damage critical infrastructure and property and regional economies and industries that depend on natural resources and favorable climate conditions. Disruptions could include more frequent and longer-lasting power outages, fuel shortages and service disruptions. NCA4 states that the continued increase in the frequency and extent of high-tide flooding due to sea level rise threatens coastal public infrastructure. NCA4 also states that expected increases in the severity and frequency of heavy precipitation events will affect inland infrastructure, including access to roads, the viability of bridges and the safety of pipelines. NCA4 finds that coastal airports are vulnerable to effects of sea level rise, with flooding potentially exacerbated by storm surges and high tides.

Projections of the effects of global climate change on the greater Pittsburgh region, the Airport, airline users of the Airport, and on Airport operations are complex and depend on many factors that are outside the Authority's control. Climate change may affect Airport operations directly, as discussed above, or indirectly, such as by disrupting operations at other airports that have ripple effects in the air transportation system. The various scientific studies that forecast climate change and its adverse effects, including sea level rise and flooding risk, are based on assumptions contained in such studies, but actual events may vary materially. Also, the scientific understanding of climate change and its effects continues to evolve. Accordingly, the Authority is unable to forecast when sea level rise or other adverse effects of climate change will occur. In particular, the Authority cannot predict the timing or precise magnitude of adverse economic effects, including, without limitation, material adverse effects on the business operations or financial condition of the Airport and the local economy during the term of the 2021 Bonds. While the effects of climate change may be mitigated by the Authority's past and future investment in adaptation strategies, the Authority cannot give any assurance about the net effects of those strategies and whether the Authority will be required to take additional adaptive mitigation measures. If necessary, such additional measures could require significant capital resources.

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. In addition, teleconference, video-conference and web-based meetings continue to improve in quality and price and are considered a satisfactory alternative to some face-to-face business meetings, especially with their increased use during the pandemic. Permanent reductions in some business travel for in-person meetings is expected to result from the adoption of teleconference, video-conference and web-based meetings by businesses and by workers who have been required to work remotely due to pandemic restrictions and have now become accustomed to remote meetings. 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.

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.

Technological Innovations in Ground Transportation

Transportation Network Companies (TNCs)

One significant source of non-airline revenues is generated from ground transportation activity, including use of on-Airport parking facilities; trip fees paid by taxis, limousines and TNCs; and rental car transactions by Airport passengers. While passenger levels had been increasing prior to 2020 and the onset of the COVID-19 pandemic, the relative market share of these sources of revenue was shifting during that period. The popularity of TNCs has increased because of the increasing number of cities where TNCs operate, the convenience of requesting a ride through a mobile application, the ability to pay for this service without providing cash or other payment to the hired driver, and competitive pricing. See "THE AIRPORT – Technological Innovations in Ground Transportation." The Authority expects that TNCs and their use by passengers will continue to evolve, and the Authority cannot provide any assurance as to the amount of revenues received from TNCs or the impact the increasing use of TNCs may have over time on revenues from parking, other ground transportation services or rental cars.

New Technologies

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

Legislative Developments

The Authority is subject to applicable federal, state and local legislation, changes to which could have a material effect on the operations or financial position of the Authority. It is not possible to predict whether any such legislation will be introduced after the date of this Official Statement or, if introduced, whether such legislation would be enacted.

No Acceleration

Events of Default under the Master Indenture and related remedies are described herein under "APPENDIX C – FORM OF MASTER INDENTURE – ARTICLE VIII, DEFAULTS AND REMEDIES." The occurrence of an Event of Default does not grant any right to accelerate payment of the 2021 Bonds. Since Net Revenues are Revenues net of all amounts needed to pay Operation and Maintenance Expenses of the Airport System, and the Authority is not subject to involuntary bankruptcy proceedings, the Authority may be able to continue indefinitely collecting Revenues and applying them to the operation of the Airport System even if an Event of Default has occurred and no payments are being made on the 2021 Bonds.

Forward-Looking Statements

The statements contained in this Official Statement, including the Appendices, and in any other information provided by the Authority 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 Authority 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 Authority. 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 2021 Bonds.

Any financial projections set forth in this Official Statement were not prepared with a view toward complying with the guidelines established by the American Institute of Certified Public Accountants with respect to the prospective financial information. The Authority's independent auditors have not compiled, examined, or performed any procedures with respect to the prospective financial information contained in this Official Statement, nor have they expressed any opinion or any other form of assurance on such information or its achievability. The Authority's independent auditors have not been consulted in connection with the preparation of any financial projections contained in this Official Statement and the Authority's independent auditors assume no responsibility for its content.

As discussed in the Report of the Airport Consultant, the factors affecting aviation activity at the Airport include: the growth of population and of the economy in the Airport's service area, airline service and route networks, the financial health and viability of the airline industry, national and international economic and political conditions, the availability and price of aviation fuel, levels of air fares, the capacity of the national air traffic control system and capacity at the Airport and elsewhere. The Report of the Airport Consultant should be read in its entirety for an understanding of all of the assumptions used to prepare the projections made therein. Inevitably, some assumptions used to develop the projections will not be realized and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the projection period will vary, and the variations may be material. See "APPENDIX B - REPORT OF THE AIRPORT CONSULTANT."

THE TRUSTEE

The obligations and duties of the Trustee are described in the Master Indenture and the Trustee has undertaken only those obligations and duties which are expressly set out in the Master Indenture. The Trustee has not independently passed upon the validity of the 2021 Bonds, the security therefor, the adequacy of the provision for payment thereof or the tax status of the interest on the 2021 Bonds, nor has the Trustee independently verified any information contained in this Official Statement. The Trustee may resign or be removed or replaced as provided in the Master Indenture.

LITIGATION

On the date of issuance and delivery of the 2021 Bonds, counsel to the Authority will deliver an opinion to the effect that, to its knowledge, among other things, there is no litigation or proceeding, pending or threatened, in any way affecting the existence of the Authority, or seeking to restrain or to enjoin the issuance, sale or delivery of the 2021 Bonds or the right of the Authority to collect Revenues and other moneys pledged or to be pledged to pay the principal of and interest on the 2021 Bonds, or the pledge thereof, or in any way contesting or affecting the validity or enforceability of the 2021 Bonds, the Master Indenture or the Airline Operating Agreements, or contesting in any way the completeness or accuracy of this Official Statement, or contesting the powers of the Authority or its authority with respect to the 2021 Bonds or the Master Indenture. In addition, on such date the Authority will deliver a certificate to the effect that, there is no litigation pending, or to the knowledge of the Authority, threatened, seeking to restrain or enjoin the issuance or delivery of the 2021 Bonds or the Airline Operating Agreements or questioning or affecting the legality of the 2021 Bonds, the proceedings and authority under which the 2021 Bonds are being issued or the validity of the Airline Operating Agreements, and that there is no litigation pending, or to the knowledge of the Authority, threatened, which in any manner, questions the right of the Authority to lease or operate the Airport System in accordance with the provisions of the Master Indenture or which, if decided adversely to the Authority, would materially adversely affect its ability to pay debt service on the 2021 Bonds. As of the date of this Official Statement, there are no pending uninsured claims that are or would be deemed material by the Authority.

RATINGS

S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC, has assigned its municipal bond rating of "AA" to the Insured 2021 Bonds with the understanding that, concurrently with the delivery of the Insured 2021 Bonds, the Policy will be issued by AGM. Kroll Bond Rating Agency has assigned its municipal bond rating of "AA+" to the Insured 2021 Bonds with the understanding that, concurrently with the delivery of the Insured 2021 Bonds, the Policy will be issued by AGM, and a rating on the 2021 Bonds, including an underlying rating on the Insured 2021 Bonds, of "A+" (stable outlook). Moody's Investors Service, Inc. has assigned its underlying rating of "A2" (stable outlook) to the 2021 Bonds. Fitch Ratings has assigned its underlying ratingof "A" (stable outlook) to the 2021 Bonds.

The ratings and outlook assigned to the 2021 Bonds by such rating agencies reflect only the views of such organizations and any desired explanation of the significance of such ratings and outlook should be obtained from the rating agency furnishing the same. Generally, a rating agency bases its rating and outlook on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that any such ratings or outlook will continue for any given period of time or that such ratings or outlook will not be revised downward or withdrawn entirely by the rating agency concerned, if in the judgment of such rating agency, circumstances so warrant. Any such downward revision or withdrawal of any such ratings may have an adverse effect on the market price of the 2021 Bonds.

TAX MATTERS

General

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law: (i) interest on the 2021A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except interest on any 2021A Bond for any period during which it is held by a "substantial user" of the facilities financed or a "related person" of such substantial user, as those terms are used in Section 147(a) of the Code, and is an item of tax preference for purposes of the federal alternative minimum tax; (ii) interest on the 2021B Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Code and is not an item of tax preference for purposes of the federal alternative minimum tax, and (iii) interest on the 2021 Bonds, and any profits made on their sale, is exempt from taxation by the Commonwealth and all political subdivisions thereof. Bond Counsel expresses no opinion as to any other tax consequences regarding the 2021 Bonds.

The opinion on federal tax matters will be based on and will assume the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the Authority contained in the transcript of proceedings and that are intended to evidence and assure the foregoing, including that the 2021 Bonds are and will remain obligations the interest on which is excluded from gross income for federal income tax purposes. Bond Counsel will not independently verify the accuracy of the Authority's representations and certifications or the continuing compliance with the Authority's covenants.

The opinion of Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. It represents Bond Counsel's legal judgment as to exclusion of interest on the 2021 Bonds from gross income for federal income tax purposes but is not a guaranty of that conclusion. The opinion is not binding on the Internal Revenue Service (the "IRS") or any court. Bond Counsel expresses no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

The Code prescribes a number of qualifications and conditions for the interest on state and local government obligations to be and to remain excluded from gross income for federal income tax purposes, some of which require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the Authority may cause loss of such status and result in the interest on the 2021 Bonds being included in gross income for federal income tax purposes retroactively to the date of issuance of the 2021 Bonds. The Authority has covenanted to take the actions required of it for the interest on the 2021 Bonds to be and to remain excluded from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. After the date of issuance of the 2021 Bonds, Bond Counsel will not undertake to determine (or to so inform any person) whether any actions taken or not taken, or any events occurring or not occurring, or any other matters coming to Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the 2021 Bonds or the market value of the 2021 Bonds.

Interest on the 2021 Bonds may be subject to a federal branch profits tax imposed on certain foreign corporations doing business in the United States and to a federal tax imposed on excess net passive income of certain S corporations. Under the Code, the exclusion of interest from gross income for federal income tax purposes may have certain adverse federal income tax consequences on items of income, deduction or credit for certain taxpayers, including financial institutions, certain insurance companies, recipients of Social Security and Railroad Retirement benefits, those that are deemed to incur or continue indebtedness to acquire or carry tax-exempt obligations, and individuals otherwise eligible for the earned income tax credit. The applicability and extent of these and other tax consequences will depend upon the particular tax status or other tax items of the owner of the 2021 Bonds. Bond Counsel will express no opinion regarding those consequences.

Payments of interest on tax-exempt obligations, including the 2021 Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a 2021 Bond owner is subject to backup withholding under those requirements, then payments of interest will also be subject to backup withholding. Those requirements do not affect the exclusion of such interest from gross income for federal income tax purposes.

Bond Counsel's engagement with respect to the 2021 Bonds ends with the issuance of the 2021 Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Authority or the owners of the 2021 Bonds regarding the tax status of interest thereon in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the 2021 Bonds, under current IRS procedures, the IRS will treat the Authority as the taxpayer and the beneficial owners of the 2021 Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit. Any action of the IRS, including but not limited to selection of the 2021 Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the market value of the 2021 Bonds.

Prospective purchasers of the 2021 Bonds upon their original issuance at prices other than the respective prices indicated on the inside cover of this Official Statement, and prospective purchasers of the 2021 Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Bond Counsel expresses no opinion.

Risk of Future Legislative Changes and/or Court Decisions

Legislation affecting tax-exempt obligations is regularly considered by the United States Congress and may also be considered by the Pennsylvania legislature. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the 2021 Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the 2021 Bonds will not have an adverse effect on the tax status of interest or other income on the 2021 Bonds or the market value or marketability of the 2021 Bonds. These adverse effects could result, for example, from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax), or repeal (or reduction in the benefit) of the exclusion of interest on the 2021 Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

For example, federal tax legislation that was enacted on December 22, 2017 reduced corporate tax rates, modified individual tax rates, eliminated many deductions, repealed the corporate alternative minimum tax, and eliminated the tax-exempt advance refunding of tax-exempt bonds and tax-advantaged bonds, among other things. Additionally, investors in the 2021 Bonds should be aware that future legislative actions might increase, reduce or otherwise change (including retroactively) the financial benefits and the treatment of all or a portion of the interest on the 2021 Bonds for federal income tax purposes for all or certain taxpayers. In all such events, the market value of the 2021 Bonds may be affected and the ability of holders to sell their 2021 Bonds in the secondary market may be reduced.

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

Original Issue Premium

Each maturity of the 2021 Bonds ("Premium 2021 Bonds") has been offered and sold to the public at a price in excess of its stated redemption price at maturity (the principal amount). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium 2021 Bond, based on the yield to maturity of that Premium 2021 Bond (or, in the case of a Premium 2021 Bond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium 2021 Bond), compounded semiannually. No portion of that bond premium is deductible by the owner of a Premium 2021 Bond. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium 2021 Bond, the owner's tax basis in the Premium 2021 Bond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium 2021 Bond for an amount equal to or less than the amount paid by the owner for that Premium 2021 Bond. A purchaser of a Premium 2021 Bond in the initial public offering who holds that Premium 2021 Bond to maturity (or, in the case of a callable Premium 2021 Bond, to its earlier call date that results in the lowest yield on that Premium 2021 Bond) will realize no gain or loss upon the retirement of that Premium 2021 Bond.

Owners of Premium 2021 Bonds should consult their own tax advisors as to the determination for federal income tax purposes of the existence of bond premium, the determination for federal income tax purposes of the amount of bond premium properly amortizable in any period with respect to the Premium 2021 Bonds, other federal tax consequences in respect of bond premium, and the treatment of bond premium for purposes of state and local taxes on, or based on, income.

LEGAL MATTERS

All legal matters incident to the authorization, issuance and sale of the 2021 Bonds are subject to the receipt of approving legal opinions from Squire Patton Boggs (US) LLP, Washington, D.C. The form of the approving opinion of Bond Counsel is included as APPENDIX E hereto. Certain legal matters will be passed upon for the Authority by its counsel, Saul Ewing Arnstein & Lehr LLP, Pittsburgh, Pennsylvania. Certain other legal matters will be passed upon for the Underwriters by their counsel, Eckert Seamans Cherin & Mellott, LLC, Pittsburgh, Pennsylvania.

FINANCIAL STATEMENTS

The statement of net position of the Authority as of December 31, 2019, and the related statements of revenues, expenses and changes in net position and cash flows for the year then ended (the "Financial Statements"), appended hereto as APPENDIX A to this Official Statement have been audited by Plante Moran, PLCC, independent auditors, as stated in their report appearing herein. The Financial Statements present financial and other information only as of the dates and for the periods set forth therein. The Financial Statements are the most recent audited financial statements of the Authority; however, inclusion of the Financial Statements herein shall not create any implication that Plante Moran, PLCC has undertaken any review or procedures with regard to financial statements or financial information as of any date or for any period beyond December 31, 2019.

UNDERWRITING

The 2021 Bonds are being purchased from the Authority by Citigroup Global Markets Inc. and PNC Capital Markets LLC, as representatives (together, the "Representatives") of the Underwriters listed on the cover of this Official Statement (collectively, the "Underwriters"). The Underwriters have agreed to purchase the 2021 Bonds from the Authority at a price of $1,017,547,150.57 (which is equal to the par amount of the 2021 Bonds, plus original issue premium of $186,337,774.95, less an underwriters' discount of $1,460,624.38), subject to the terms of a bond purchase agreement (the "Bond Purchase Agreement") among the Representatives and the Authority. The Bond Purchase Agreement provides that the Underwriters will purchase all of the 2021 Bonds if any are purchased, and that the obligation to make such purchase is subject to certain terms and conditions set forth in the Bond Purchase Agreement, the approval of certain legal matters by counsel, and certain other conditions.

The Underwriters intend to offer the 2021 Bonds to the public at the initial offering price or prices set forth on the inside cover page of this Official Statement. The Underwriters may allow concessions from the initial public offering prices to certain dealers, banks and others. After the initial public offering, the public offering prices may be varied from time to time by the Underwriters, without prior notice.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage 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 Authority for which they received or will receive customary fees and expenses. In addition, PNC Bank, National Association, which is an affiliate of PNC Capital Markets LLC, one of the Underwriters, is a lender to the Authority pursuant to a separate credit facility (the PNC Line of Credit). See "CERTAIN RELATIONSHIPS."

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 Authority.

Citigroup Global Markets Inc., an Underwriter of the 2021 Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, "Fidelity"). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.

PNC Capital Markets LLC may offer to sell to its affiliate, PNC Investments, LLC ("PNCI"), securities in PNC Capital Markets' inventory for resale to PNCI's customers, including securities such as those to be offered by the Authority.

BofA Securities, Inc., an Underwriter of the 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, Inc. 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, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the 2021 Bonds.

J.P. Morgan Securities LLC ("JPMS"), an Underwriter of the 2021 Bonds, has entered into negotiated dealer agreements (each, a "Dealer Agreement") with each of Charles Schwab & Co., Inc. ("CS&Co.") and LPL Financial LLC ("LPL") for the retail distribution of certain securities offerings at the original issue prices. Pursuant to each Dealer Agreement, each of CS&Co. and LPL may purchase 2021 Bonds from JPMS at the original issue price less a negotiated portion of the selling concession applicable to any2021 Bonds that such firm sells.

SWS Capital Management, LLC ("Affiliate"), an affiliate of Siebert Williams Shank & Co., LLC ("SWS"), an Underwriter of the 2021 Bonds, which is a registered investment advisor, has three sub-advisory agreements with PFM Asset Management LLC, which is an investment advisor affiliate of PFM Financial Advisors LLC. The sub-advisory agreements do not relate to the Authority. Affiliate's business is separate from SWS's business and the employees of SWS who cover the Authority are not involved in the activities of Affiliate.

FINANCIAL ADVISOR

PFM Financial Advisors LLC (the "Financial Advisor") is serving as financial advisor to the Authority for the issuance of the 2021 Bonds. The Financial Advisor is not obligated to undertake, and has not undertaken, either to make an independent verification of or to assume responsibility for, the accuracy, completeness, or fairness of the information contained in this Official Statement. The Financial Advisor is an independent financial advisory firm and is not engaged in the business of underwriting, trading or distributing securities. The Financial Advisor is a registered municipal advisor with the SEC and the Municipal Securities Rulemaking Board under the Dodd-Frank Act of 2010.

AIRPORT CONSULTANT

LeighFisher, San Francisco, California, has served as the Airport Consultant to the Authority. See "REPORT OF THE AIRPORT CONSULTANT" herein and attached hereto as APPENDIX B. References to and excerpts from such report contained in this Official Statement do not purport to be an adequate summary of such report or complete in all respects. Such report is an integral part of this Official Statement and should be read in its entirety for complete information with respect to the subjects discussed herein.

CONTINUING DISCLOSURE

Pursuant to Securities and Exchange Commission Rule 15c2-12 under the Securities Exchange Act of 1934, as amended (the "Rule"), the Authority has entered into a Continuing Disclosure Agreement (the "Disclosure Agreement") with Digital Assurance Certification, L.L.C. ("DAC" or the "Dissemination Agent") which includes an undertaking (the "Undertaking") for the benefit of the holders of its outstanding 2021 Bonds to provide certain financial information and operating data on an annual basis (the "Annual Report") and to provide notice of certain enumerated events if such events are determined to be material under the federal securities laws. The Authority has determined that it is currently the sole "obligated person" (as defined in the Rule) ("Obligated Person") with respect to the Bonds.

The Annual Report will be filed, for each fiscal year of the Authority commencing with the fiscal year ended December 31, 2021, not later than September 30 of the following fiscal year, with the Municipal Securities Rulemaking Board (the "MSRB") through its Electronic Municipal Market Access system ("EMMA") for municipal securities disclosure on through and other electronic format or system prescribed by the MSRB for purposes of Section (b)(5) of the Rule. Notices of reportable events (as described below) will be filed with the MSRB through EMMA.

Annual Information. The Annual Information concerning the Authority shall consist of (1) audited financial statements, prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"), and (2) the financial and operating data regarding the Airport System substantially of the type included in the tables appearing under the following headings and subheadings of this Official Statement: "AIRPORT ACTIVITY INFORMATION – Enplaned Passengers at the Airport" (updating the table "Enplaned Passengers by Airline Group" for the fiscal year covered by such Annual Report and the four prior fiscal years but excluding interim information and compound annual growth rate); "AIRPORT ACTIVITY INFORMATION – Air Service at the Airport" (as of the end of the fiscal year covered by such Annual Report); "AIRPORT ACTIVITY INFORMATION – Airline Market Shares" (updating the table for the fiscal year covered by such Annual Report and the four prior fiscal years); "FINANCIAL INFORMATION" (updating the Statements of Revenues, Expenses and Changes in Net Position table on page 50 for the fiscal year covered by such Annual Report and the four prior fiscal years); and "FINANCIAL INFORMATION – Debt Service Coverage" (updating the table therein for the fiscal year covered by such Annual Report and the four prior fiscal years); provided that in each case the Issuer shall not be required to provide updated interim information set forth in such portions of the Official Statement.

Notice of Reportable Events. The notices to be provided under the Rule, which the Authority will undertake to provide as described above, within ten business days, written notice of the occurrence of any of the following events with respect to the 2021 Bonds ("Reportable Event Notices"):

(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 or events affecting the tax-exempt status of the 2021 Bonds;
(vii) Modifications to rights of holders of the 2021 Bonds, if material;
(viii) 2021 Bond calls (other than mandatory sinking fund redemptions);
(ix) Defeasances;

(x) Release, substitution or sale of property securing repayment of the 2021 Bonds, if material;
(xi) Rating changes;
(xii) Bankruptcy, insolvency or receivership of the Authority;
(xiii) Consummation of a merger, consolidation or acquisition involving the Authority or the sale of all or substantially all of the assets of the Authority, other than in the ordinary course of business;
(xiv) Appointment of a successor or additional trustee or the change of name of the Trustee, if material;
(xv) Incurrence of a financial obligation (as defined in the Rule) of the Authority, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the Authority, any of which affects holders of the 2021 Bonds, if material; and
(xvi) Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the Authority, any of which reflect financial difficulties.

Amendments. The Undertaking may be amended without the consent of the holders of the 2021 Bonds, but only upon the Authority providing (a) notice of such delivery and of the amendment to the MSRB through EMMA and (b) an opinion of counsel expert in federal securities laws acceptable to both the Authority and the Dissemination Agent to the effect that such amendment or waiver does not materially impair the interests of the holders of the 2021 Bonds and would not, in and of itself, cause the undertakings therein to violate the Rule if such amendment or waiver had been effective on the date of the Undertaking but taking into any subsequent change in or official interpretation of the Rule; provided neither the Authority or the Disclosure Dissemination Agent shall be obligated to agree to any amendment modifying their respective duties or obligations without their consent thereto.

Termination. The continuing obligation of the Authority and each other Obligated Person (if any) to provide Annual Information and Reportable Event Notices shall terminate immediately upon the legal defeasance, prior redemption or payment in full of all of the 2021 Bonds, when the Authority is no longer an Obligated Person with respect to the 2021 Bonds, or upon delivery by the Authority to the Dissemination Agent of an opinion of counsel expert in federal securities laws to the effect that continuing disclosure is no longer required. In addition, the Undertaking, or any provision thereof, shall be null and void in the event that the Authority obtains an opinion of counsel expert in federal securities laws to the effect that those portions of the Rule which require the Undertaking, or any such provision, are invalid, have been repealed retroactively or otherwise do not apply to the 2021 Bonds, provided that the Authority shall have provided notice of such delivery and the cancellation of the Undertaking to the MSRB through EMMA.

The Authority did not file with EMMA in a timely manner its audited financial statements for the fiscal years ended December 31, 2016 and December 31, 2017 or its annual operating data for the fiscal years ended December 31, 2016 and December 31, 2017. In addition, the Authority failed to timely file certain notices of rating changes with respect to its bonds outstanding during the five year period prior to the date of this Official Statement. All such filings were subsequently made and a notice regarding the failure to file such information and notices in a timely matter was filed by the Authority with EMMA in October 2019.

CERTAIN RELATIONSHIPS

An affiliate of PNC Capital Markets LLC, one of the Underwriters, is a lender to the Authority pursuant to the PNC Line of Credit.

The Authority engaged PFM Asset Management LLC ("PFMAM"), an affiliate of the Financial Advisor, to assist it in the termination of a forward delivery agreement and provide certain other services related to the defeasance of the Authority's previously outstanding bonds. PFMAM is an investment adviser registered under the Investment Advisers Act of 1940. PFMAM completed providing its services when the Authority's previously outstanding bonds were defeased in December 2019.

Squire Patton Boggs (US) LLP, Bond Counsel, has, from time to time, represented certain of the Underwriters in bond financing matters unrelated to the Authority and its issuance of the 2021 Bonds.

LeighFisher, the Authority's Airport Consultant, and Jacobs, the Program Manager for the TMP, are both divisions of Jacobs Engineering Group. The two divisions operate independently of one another in providing professional services to the Authority.

MISCELLANEOUS

The references herein to the Act, the Master Indenture and the Airline Operating Agreements are brief outlines of certain provisions thereof. Such outlines do not purport to be complete and reference is made to such documents and the Act for full and complete statements of their provisions.

Any statement made in this Official Statement involving matters of opinion or of 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 other parts of this Official Statement.

The delivery of this Official Statement and its distribution and use have been duly authorized by the Authority.

THE ALLEGHENY COUNTY AIRPORT AUTHORITY

By: /s/ Christina A. Cassotis, Chief Executive Officer
Christina A. Cassotis, Chief Executive Officer

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APPENDIX A

ANNUAL COMPREHENSIVE FINANCIAL REPORT FOR THE YEAR ENDED DECEMBER 31, 2020

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Allegheny County Airport Authority

(a component unit of the County of Allegheny, Pennsylvania)

Annual Comprehensive Financial Report
with Supplemental Information
December 31, 2020

Contents

Introductory Section

ALLEGHENY COUNTY AIRPORT AUTHORITY
PITTSBURGH INTERNATIONAL AIRPORT
ALLEGHENY COUNTY AIRPORT

March 31, 2021

To the Board of Directors of the Allegheny County Airport Authority,

This Annual Comprehensive Financial Report of the Allegheny County Airport Authority (the "Authority") is hereby submitted for the fiscal year ended December 31, 2020. Responsibility for the accuracy of the data, completeness, and fairness of the presentation, including all disclosures, rests with the Finance Department of the Authority. To the best of our knowledge and belief, the enclosed data is accurate in all material respects and is reported in a manner designed to fairly present the financial position and results of the operations of the Authority. This Letter should be read in conjunction with the accompanying Management Discussion and Analysis to gather a more complete financial and business picture of the Authority.

REPORTING ENTITY

The Authority was created on June 17, 1999 and exists pursuant to the Municipality Authorities Act of May 2, 1945, P.L. 382, as amended. The Authority is governed by a nine-member Board of Directors appointed by the County Executive of Allegheny County.

The Authority manages and operates two airports that include Pittsburgh International Airport (PIT) and Allegheny County Airport (AGC). Pittsburgh International Airport is a commercial passenger facility and is located 16 miles west of downtown Pittsburgh. Allegheny County Airport is a general aviation airport located in West Mifflin, approximately 10 miles southeast of downtown Pittsburgh.

ECONOMIC CONDITIONS

Like all airports, Pittsburgh International Airport was significantly impacted in 2020 by the COVID-19 pandemic. In the five years leading up to the pandemic, however, growth was remarkable, with record O&D traffic, new flights, new airlines, new destinations, and strong finances. The Authority went into the pandemic in a strong position and took immediate fiscal and operational actions to mitigate the negative impacts, including reducing or delaying all non-mission critical operational and capital spending.

The Authority benefited from three instances of Federal pandemic relief in 2020 and early 2021, (1) the Coronavirus Aid, Relief, and Economic Security Act, (2) the Coronavirus Response and Relief Supplemental Appropriation Act, and (3) the American Rescue Plan Act of 2021. This relief comes in the form of grant revenue totaling an estimated $82.8 million over the next four

Pittsburgh International Airport
Landside Terminal, 4th Floor Mezz.
PO Box 12370 | Pittsburgh, PA 15231-0370
(412) 472-3500 | FLYPITTSBURGH.COM

years. These Federal Acts serve to partially offset the significant reduction in the Authority's revenue during the downturn in the travel industry caused by the pandemic.

STAYING TRUE TO OUR FIVE-YEAR BUSINESS PLAN

In 2019, Authority leadership launched a five-year business plan, titled the Smart Plan Forward. The Smart Plan Forward formulated innovative ways of working, inspiring the team, and a clear destination: a Smarter Airport driven by the dual imperatives of (1) safety, security, and health and (2) air service. With this plan, the Authority will redefine what it means to be an airport. More than an airport operator, a Smarter Airport acknowledges and supports the complex system of modernized physical space, cutting-edge technology, and interdependent relationships among its stakeholders. All of these elements are needed to galvanize travelers and ensure the safety and efficiency of flight arrivals and departures. The Authority's vision of a Smarter Airport will inspire the next generation of aviation leadership.

The pandemic made the initiatives outlined in the Smart Plan Forward even more crucial than before. By focusing on the plan, the Authority was able to pivot, innovate, and find some success in the pandemic world. Leadership used the opportunity to calibrate itself for a new future and prioritized working on the dual imperatives, as well as focusing on innovation, technology, and airport development. These actions proved essential in keeping the airport well-positioned for the return of travel.

Safety, Security, and Health: The health lens was enhanced in everything the Authority does. A health and safety program known as *Safe Travels* was implemented airport-wide for passengers and staff. Partnering with a local robotics firm, Pittsburgh International Airport was the first airport in the nation to use UV disinfecting light on autonomous robots to clean floors.

Air Service – Passenger and Cargo: Pittsburgh International Airport's passenger traffic finished the year down 62.7 percent, in line with national averages related to the impact of the pandemic. Conversely, cargo tonnage, including mail, finished down only 2.4 percent as a result of the initiatives outlined below. Operations at Allegheny County Airport finished the year down 10 percent with 53,285 operations, as private flying recovered more quickly than commercial flying in the second half of 2020.

Cargo: Cargo has become a key part of Pittsburgh International Airport's business plan. Officials look to build the airport into an international logistics center, capitalizing on its abundant space and ideal geographic location. Advancing the airport's competitive advantages for cargo growth persuaded Qatar Airways Cargo, National Airlines, and Cathay Pacific Airways to bring cargo freighters into PIT.

To support cargo growth, the Authority plans to build a 75,000-square-foot cargo processing facility, aircraft taxiway and ramp, and an adjacent surface parking lot. The project will be partially funded through an $18.7 million BUILD grant. PIT was the first airport to ever be awarded this grant by the U.S. Department of Transportation. The expansion projects, called Cargo 4, are expected to be operational in 2024. Cargo 4 will enable Pittsburgh International Airport to serve additional larger planes and offer opportunities for airlines that require sorting facilities and access for high volumes of trucks.

Development: Stabilizing and growing non-airline revenues in non-traditional ways was a mandate from leadership. In aiming for that goal, the Authority found success in its real estate development initiative. In 2019, the Authority announced plans for Neighborhood 91, the world's first development program to condense and connect all components of the additive manufacturing 3-D printing supply chain into one production neighborhood concept. In 2020, the Authority announced its anchor tenant, Wabtec. The Fortune 500 company, which maintains operations on six continents from its Pittsburgh headquarters, is a leading provider of equipment, systems, digital solutions, and value-added services for freight and transit rail.

Innovation: Like many other airports, Pittsburgh International Airport is seeking alternative energy sources. Taking this concept to a higher level, PIT is well on its way to becoming the first major airport to be completely powered by its own microgrid. The project is in construction now and scheduled to be completed in June of 2021. Once complete, the microgrid will be capable of producing enough energy to power more than 13,000 residential homes, an equivalent of more than 23 megawatts of electricity. The project is expected to lower the cost of electricity to the Authority and its tenants while making PIT one of the most site-hardened airports in the world.

The Authority continues to develop its natural resources. Natural gas drilling began in June 2016, with the Authority receiving monthly royalty payments equal to 18% of the production value. Net revenues from the natural gas lease are being used to reduce airline rates and for capital expenditures, including economic development.

Technology: Pittsburgh International Airport's latest transformative venture is the xBridge, a 10,000-square-foot innovation center custom-built to nurture the evolution of the aviation industry and inspire creative solutions to aviation's many challenges. In 2020, Fortune 100 company Honeywell joined several local partners in this learning laboratory. The company is partnering with the Authority to develop a live dashboard measuring air quality that will help the Authority's staff identify and correct issues in real time. Based on the success of xBridge pilot systems, PIT may expand the technology throughout the airport. Carnegie Mellon University and other local firms, including Zensors, Carnegie Robotics, and RE^2, joined Honeywell in selecting xBridge as the ideal place to test and develop their products.

These are just a few examples of why Pittsburgh International Airport was named as one of *Fast Company* magazine's most innovative businesses for 2020—a distinguished award for any organization and an exceptional award for an airport.

TERMINAL MODERNIZATION PROGRAM

The Authority has completed design of its $1.39 billion Terminal Modernization Program (TMP) that will stabilize airline costs and modernize and right-size the facilities for decades to come. Program construction was delayed in 2020 as a result of the pandemic. However, airlines continue to support the project and have recently authorized the start of construction with initial site preparation and early stage project bids.

During the construction delay, the Authority re-examined all aspects of the design to incorporate public health measures, including new health and safety conventions developed in response to the pandemic. The TMP design was informed and influenced by extensive collaboration and coordination between the Authority and the airlines serving the airport, as well as community input. The TMP is designed to balance airside and landside terminal operations to serve current and projected passenger demand and capacity requirements, as well as to improve building system functionality for a terminal with systems reaching the end of their useful life. It is estimated that the TMP will be completed in 2024 with an opening in early 2025. More information on this major capital initiative can be found at www.PITtransformed.com.

BUDGETARY CONTROLS

The budget process is designed to ensure that the Authority will have adequate funding to meet its operational objectives. The Airline Operating Agreement specifies a residual rate-making methodology for the calculation of airline rates and charges. The aggregate of airport fees paid by the Signatory Airlines must be sufficient to pay for the net cost of operating, maintaining, and developing the airfield and terminals of Pittsburgh International Airport and Allegheny County Airport. The Authority's annual operating and capital budgets are reviewed and approved by its Board of Directors.

FINANCIAL INFORMATION AND INTERNAL CONTROLS

Management of the Authority is responsible for implementing and maintaining an internal control structure to ensure the integrity of the Authority's operations and to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States. The internal control structure is designed to provide reasonable assurance that the assets, resources, and operations of the Authority are handled in a manner that protects against waste, theft, neglect, and other irregularities that may hinder operations, as well as to ensure that financial transactions are properly recorded and adequately documented. The Authority has established internal controls to fulfill these requirements. These controls are reviewed annually by an external audit firm for applicability, relevance, and effectiveness.

INDEPENDENT AUDIT

The Authority's independent auditor, Plante & Moran, PLLC, has performed the annual audit for the year ended December 31, 2020, and has rendered an unmodified opinion as to the Authority's financial statements. The audits were conducted in accordance with auditing standards generally accepted in the United States. Their report is contained herein.

CERTIFICATE OF ACHIEVEMENT

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Allegheny County Airport Authority for its Annual Comprehensive Financial Report for the fiscal year ended December 31, 2018. That was the ninth consecutive year that the Authority achieved this prestigious award. The December 31, 2019 Annual Comprehensive Financial Report is currently under review by the GFOA. In order to receive the Certificate of Achievement, a government entity must publish an easily readable and efficiently organized Annual Comprehensive Financial Report. This report must satisfy both accounting principles generally accepted in the United States and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. Management believes the current Annual Comprehensive Financial Report continues to meet the Certificate of Achievement Program requirements.

ACKNOWLEDGEMENTS

The completion of this report would not have been possible without the support of the Authority's Board of Directors and their commitment to the continuous improvement of corporate governance and financial reporting. In addition, key members of the Finance Department played a major role in compiling and completing this report.

Sincerely,

Christina A. Cassotis
Chief Executive Officer

ACAA Board of Directors

2020

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Matt Smith, Vice Chairman

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Jan Rea, Treasurer

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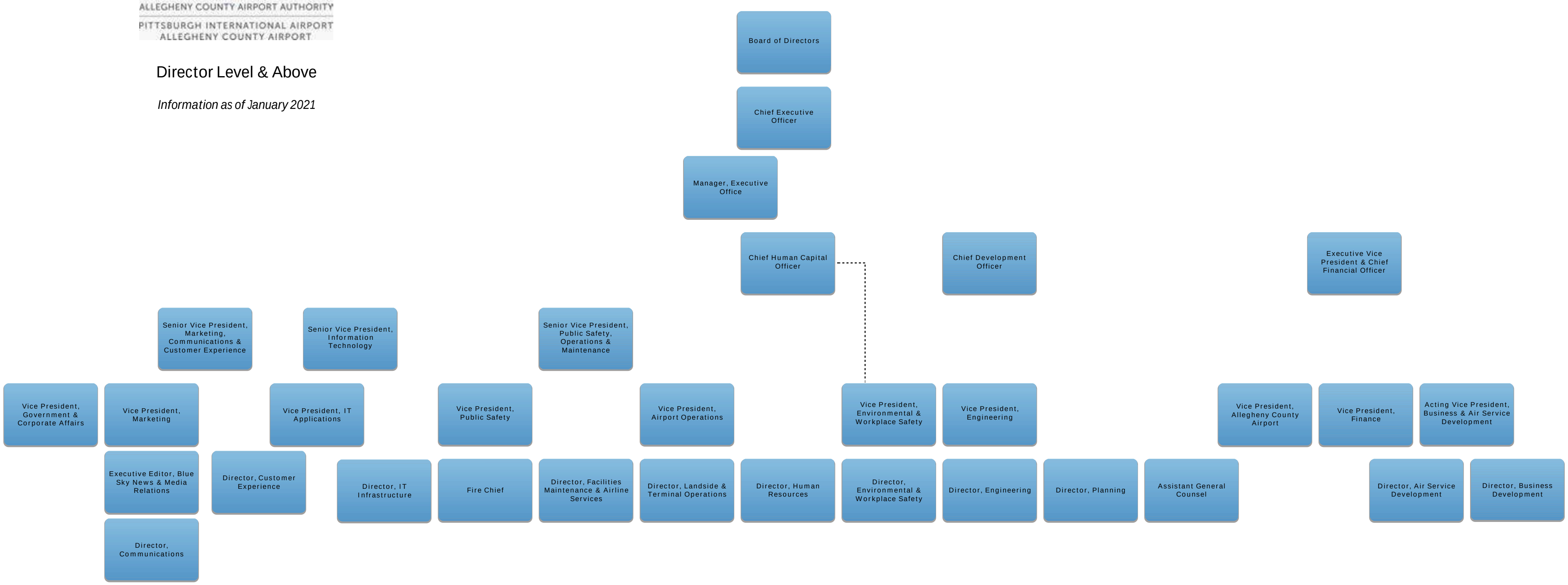
ALLEGHENY COUNTY AIRPORT AUTHORITY
PITTSBURGH INTERNATIONAL AIRPORT
ALLEGHENY COUNTY AIRPORT

Director Level & Above

Information as of January 2021



Financial Section

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Independent Auditor's Report

To the Board of Directors
Allegheny County Airport Authority

Report on the Financial Statements

We have audited the accompanying financial statements of Allegheny County Airport Authority (the "Authority"), a component unit of the County of Allegheny, Pennsylvania, as of and for the year ended December 31, 2020 and the related notes to the financial statements, which collectively comprise the Authority's financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Allegheny County Airport Authority as of December 31, 2020 and the respective changes in its financial position and its cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

To the Board of Directors
Allegheny County Airport Authority

Other Matters

Required Supplemental Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and required supplemental information, as identified in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplemental information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The introductory and statistical section schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements. The introductory and statistical section schedules, as identified in the table of contents, have not been subjected to the auditing procedures applied in the audit of the basic financial statements, and, accordingly, we do not express an opinion or provide any assurance on them.

Plante & Moran, PLLC

March 31, 2021

The Allegheny County Airport Authority's (Authority) discussion and analysis is presented to (a) assist the reader in focusing on significant financial issues, (b) provide an overview of the Authority's financial activity, and (c) identify changes in the Authority's financial position. Management encourages the reader to consider Management's Discussion and Analysis of the Authority's financial performance in conjunction with the information contained in the Authority's financial statements.

The Airline Operating Agreement

The Authority is responsible for the operation of the facilities at Pittsburgh International Airport (PIT or the Airport) and the Allegheny County Airport (AGC) (collectively the Airports). PIT and AGC are operated by the Authority pursuant to an Airline Operating Agreement and Terminal Building Lease (the AOA). The original term of the AOA expired on May 8, 2018. The Authority amended and extended the agreement through December 31, 2019. The Authority then negotiated a new AOA that became effective January 1, 2020 and expires on December 31, 2021. This new AOA has been signed by Alaska Airlines, Allegiant Air, American Airlines, British Airways, Delta Air Lines, JetBlue Airways, Southwest Airlines, Spirit Airlines, and United Airlines (the Signatory Airlines).

Airline revenue at PIT is based upon a residual arrangement as determined in the AOA. Signatory Airlines agree to pay for the operations of the Airports, as well as fund certain capital expenditures, based upon rates and charges that take into account all revenues, expenses and debt service. The AOA is designed to minimize costs to the Signatory Airlines while assuring the payment of all net operating costs and debt service of the Airports.

Overview of the Financial Statements

The Authority's financial statements are prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America promulgated by the Governmental Accounting Standards Board (GASB). Revenues are recognized when earned, and expenses are recognized when incurred. Capital assets are recorded in land, building, and equipment accounts and are depreciated over their useful lives (except land). See Notes 1 and 2 to the financial statements for a summary of the Authority's organization and significant accounting policies. Following this discussion and analysis are the financial statements of the Authority, including the notes, which are essential to a full understanding of the data contained in the financial statements. The Authority's financial statements are designed to provide readers with a broad overview of the Authority's financial position and activities.

The Statement of Net Position presents information on all of the Authority's assets, deferred outflows, liabilities and deferred inflows, with the difference reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of the Authority's financial condition.

The Statement of Revenues, Expenses and Changes in Net Position presents information showing the change in the Authority's net position during the fiscal year. All changes in net position are reported as soon as the underlying event occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are recorded and reported in this statement for some items that will result in cash flows in future periods.

The Statement of Cash Flows relates to the flows of cash and cash equivalents. Consequently, only transactions that provide or use cash are recorded in this statement. A reconciliation is provided at the bottom of the Statement of Cash Flows to assist in the understanding of the difference between (1) the operating loss and (2) net cash and cash equivalents used in operating activities.

For the fiscal years ending December 31, 2015 through December 31, 2018, the Authority's audited financial statements included comparative information for the prior fiscal year. The Authority's audited financial statements for the fiscal year ended December 31, 2020 only present single year financials. The Authority first took this approach for fiscal year 2019. The Authority's 2020 Annual Comprehensive Financial Report will include the ten-year statistical section as provided in previous years.

Significant Events and Financial Highlights

Enplaned passengers at the Airport decreased by 62.7% in 2020 as compared to 2019, which followed the prior year's 1.2% increase. The decline in passengers during 2020 was a result of reduced demand due to the coronavirus pandemic that significantly impacted passenger counts in the last 10 months of 2020. The Airport's diversified portfolio of airlines, including major network carriers, low cost carriers, and ultra low cost carriers helped weather the pandemic's impacts. American Airlines and Southwest Airlines traded positions several times during 2020 as the market share leader. Before the pandemic, 1 in 10 passengers were flying on an ultra low cost carrier, while heading into 2021 the ratio is closer to 1 in 5.

Air cargo tonnage experienced some positive developments in 2020, such as larger aircraft and additional flights. Year-over-year cargo tonnage at PIT was down only 2.4% versus 2019. During 2020, Cathay Pacific, National Airlines and Qatar Airways helped to drive the continual improvement in international cargo activity. In the second half of 2020, increased operations by integrators FedEx and UPS helped to increase domestic cargo activity.

Despite the headwinds associated with 2020, the Airport has had success during the first quarter of 2021 in recruiting additional air service. Many airlines have announced new or expanded service to popular leisure destinations. Cargo activity is also off to a strong start with tonnage increasing 7.4% year-to-date through February 2021 when compared to the first two months of 2020. As of March 2021, 11 carriers provide regularly scheduled service to and from PIT, as well as two charter operators.

The Authority continues to be designated as a recipient of Pennsylvania state revenue generated from casinos and operations that combine a racetrack with a casino. This designation is a result of the Pennsylvania Racehorse Development and Gaming Act which is often referred to as the Gaming Act. An amendment to this act known as the Pennsylvania Gaming Economic Development and Tourism Fund Capital Budget appropriated a $12.4 million payment to the Authority in 2020. The Authority expects to continue to receive this $12.4 million annual payment for as long as it is a recipient under the Gaming Act.

The parking operation at PIT is the largest non-aeronautical operating revenue generator for the Airport. There was $13.7 million of parking revenue included in the results of the Airport for 2020, down from $41.6 million for 2019. This 67.1% decrease is directly related to the 62.8% decline in passenger traffic caused by the coronavirus pandemic.

On February 8, 2013, the Authority's Board awarded the bid to drill natural gas at the Airports to CNX Gas Company LLC (CNX). Their lease will continue from year to year as drilling continues. In addition to ground rent, the authority earns ongoing royalties on the natural gas production. Net revenues from the natural gas lease have been used to reduce airline rates and charges and for capital expenditures, including economic development, at the Airport. During 2020 and 2019, drilling revenues of $5.6 million and $10.1 million, respectively, were received with $7.9 million allocated to fund various capital projects and $3.8 million allocated to reduce airline rates and charges.

On December 18, 2019, the Authority utilized $75.8 million in cash and other monetary assets from existing resources to complete an in-substance defeasance of all outstanding bonds. The cash was used to purchase U.S. Treasury Securities which were deposited in an irrevocable trust with an escrow agent to provide for all future debt service payments on the bonds. As a result, the bonds are considered to be defeased. The liability for the bonds and related balances have been removed from long term debt, and a loss of $3.6 million was recorded during 2019. This defeasance allows the Authority to issue future bonds under a new modernized bond indenture. The Airlines have agreed to reimburse the Authority $24.9 million in future years, representing the amount of unrestricted funds the Authority used in the defeasance.

The following is a summary of the Authority's statements of revenues, expenses and changes in net position for the years ended December 31, 2020 and 2019 (in thousands):

	2020	2019	% Change 2020 vs 2019
Operating revenues			
Landing fees and airline rentals and fees	$ 47,157	$ 59,055	-20.1%
Parking revenues	13,712	41,631	-67.1%
Rental car revenues	7,933	12,510	-36.6%
Other revenues	28,710	31,366	-8.5%
Total operating revenues	97,512	144,562	-32.5%
Nonoperating revenues			
Passenger and customer facility charges	11,531	28,516	-59.6%
Gaming act revenues	12,400	12,400	-
Gas drilling revenues	5,560	10,122	-45.1%
Non-capital grants	13,092	-	-
Other revenues	2,539	5,231	-51.5%
Total nonoperating revenues	45,122	56,269	-19.8%
Total revenues	142,634	200,831	-29.0%
Operating expenses			
Salaries, wages, and benefits	54,765	53,700	2.0%
Utilities, cleaning, and maintenance	27,257	29,779	-8.5%
Depreciation	60,418	56,981	6.0%
Other expenses	38,385	39,331	-2.4%
Total operating expenses	180,825	179,791	0.6%
Nonoperating expenses			
Interest expense	881	3,538	-75.1%
Loss on defeasance	-	3,636	-
Other expenses	432	7	5785.7%
Total nonoperating expenses	1,313	7,181	-82.0%
Total expenses	182,138	186,972	-2.6%
Income before capital contributions and grants	(39,504)	14	-385.0%
Capital contributions and grants	19,962	8,175	144.2%
(Decrease) Increase in net position	$ (19,542)	$ 22	-188.7%
Net Position – beginning of year	$ 655,404	$ 633,370	3.5%
Net Position – end of year	$ 635,862	$ 655,404	-3.0%

Total operating revenues were down approximately $47.1 million, or 32.5%, compared to 2019. The net decrease in landing and terminal fees of $11.9 million was primarily a result of lower expenses and capital fund deposits charged to the airlines. Combined parking and ground transportation revenues finished the year down $27.9 million, or 67.1%, compared to 2019 as a direct result of the 62.8% decrease in enplaned passengers year over year. Similarly, rental car revenues were down $4.6 million, or 36.6% in 2020 as compared to 2019.

Total operating expenses (including depreciation) were up $1.0 million, or 0.6%, in 2020 as compared to 2019. Salaries, wages and benefits increased approximately $1.1 million, mainly due to the continued application of GASB Statement No. 68, Accounting and Financial Reporting for Pensions. This application resulted in the recognition of additional pension expense of $14.7 million and $8.9 million in 2020 and 2019, respectively. Excluding the additional pension expense and depreciation, operating expenses were $8.2 million lower in 2020 due to the implementation of various cost saving measures in response to the revenue losses discussed above.

Nonoperating revenues and nonoperating expenses both declined in 2020, accounting for $5.3 million of the reduction in net position from 2019 to 2020. Non-capital grants consisted primarily of funds received via the Coronavirus Aid, Relief and Economic Security Act. Passenger and customer facility charges decreased by $17.0 million due to the decline in passenger traffic during 2020. Gas drilling revenues were $4.6 million lower in 2020 due to a decrease in drilling volumes and market prices.

Capital contributions and grants increased by $11.8 million in 2020, primarily due to $6.2 million in grants for security systems and aircraft ramp rehabilitation.

Significant Capital Project – Terminal Modernization Program

In 2017, the Authority approved its master plan for the Airport which identified the need to right-size and modernize the Airport's terminal facilities. The existing terminal was designed and constructed in the late 1980s and early 1990s in close cooperation with the former US Airways to accommodate its hubbing operations. The terminal complex was therefore designed to handle high volumes of connecting traffic. The Airport no longer serves as a major hub, with US Airways ending its hubbing operations in 2004. Traffic at the Airport is now comprised of approximately 97% origination and destination ("O&D") passengers. Passengers are served by a diversified portfolio of airlines. Because the Airport is no longer a hub, the existing terminal facilities far exceed the current level of activity in some respects, and in other respects are undersized for a thriving O&D market. In addition, building systems such as elevators, escalators, mechanical, electrical, and communications that became operational in 1992 are reaching or have reached the end of their respective service lives. Furthermore, other aspects of the terminal are causing capacity issues in the security screening areas.

The Terminal Modernization Program (TMP) will replace the existing landside terminal at the Airport with a new landside terminal housing ticketing, the TSA checkpoint, and baggage claim. In addition, associated facilities including roadways, parking, and rental car facilities will be constructed adjacent to the new terminal. The new landside terminal will be integrated with the existing airside terminal and will eliminate the need for the train that connects the existing facilities. Design of the new terminal has taken into account evolving customer requirements, technology, and health standards. The TMP design was informed and influenced by extensive collaboration and coordination between the Authority and the airlines serving the Airport. The TMP is designed to balance airside and landside terminal operations to serve current and projected passenger demand as well as improve building system functionality and operating costs.

COVID-19 Significant Legislation (3 Acts)

On March 11, 2020, the World Health Organization declared a pandemic, based on the outbreak of a respiratory disease caused by a new coronavirus. First identified in late 2019 and now known as COVID-19, the outbreak has spread across the globe. In response, many countries have implemented measures to combat the outbreak. These measures included international travel restrictions, and in some states, orders to stay home. As a result, domestic travel across the United States significantly declined. However, legislation was subsequently passed on three separate occasions to partially offset the negative financial impacts of COVID-19.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act (H.R. 748, Public Law 116-136), signed into law on March 27, 2020, included $10 billion in funds to be awarded as economic relief to eligible U.S. airports affected by the COVID-19 pandemic. The Authority was awarded $36.2 million. Funds are to be utilized within four years, with a key focus on operating costs and debt service. During 2020, the Authority utilized $10.7 million of the CARES funding to partially offset reductions in revenue caused by the pandemic. Other revenue losses were mitigated by reducing operating expenses and deferred capital spending.

The Coronavirus Response and Relief Supplemental Appropriation Act, signed into law on December 27, 2020, includes nearly $2 billion in funds to be awarded as economic relief to eligible U.S. airports and eligible concessions at those airports. From this second relief package, the Authority was awarded $10.7 million, which included $1.0 million in relief to third party concessions.

The American Rescue Plan Act of 2021 (H.R. 1319, Public Law 117-2), signed into law on March 11, 2021, includes $8 billion in funds to be awarded as economic assistance to eligible U.S. airports. As of March 25, 2021, the Authority expects to receive another $35.9 million.

Financial Position

The following represents a summary of the Authority's statements of financial position at December 31, 2020 and 2019 (in thousands):

	2020	2019	% Change 2020 vs 2019
Assets and Deferred Outflows of Resources			
Assets			
Current assets - unrestricted	$ 129,003	$ 101,971	26.50%
Current assets - restricted	9,237	13,977	-33.90%
Net property and equipment	674,125	646,096	4.30%
Other noncurrent assets - unrestricted	1,836	17,789	-89.70%
Other noncurrent assets - restricted	32,860	40,131	-18.10%
Total assets	847,061	819,964	3.30%
Deferred Outflows of Resources	35,721	19,140	86.60%
Total assets and deferred outflows of resources	$ 882,782	$ 839,104	5.20%

	2020	2019	% Change 2020 vs 2019
Liabilities and Deferred Inflows of Resources			
Liabilities			
Current payables from unrestricted assets	$ 21,715	$ 19,910	9.10%
Current payables from restricted assets	9,237	13,978	-33.90%
Long-term liabilities	210,193	146,853	43.10%
Total liabilities	241,145	180,741	33.40%
Deferred Inflows of Resources	5,775	2,959	95.20%
Total liabilities and deferred inflows of resources	246,920	183,700	35.40%
Net Position			
Net investment in capital assets	595,210	600,732	-0.90%
Restricted	32,860	40,079	-18.00%
Unrestricted	7,792	14,593	-46.60%
Total net position	$ 635,862	$ 655,404	-3.00%

The Authority's total net position decreased by $19.5 million from 2019 due to the following changes. The net investment in capital assets decreased by $5.5 million, primarily due to an increase of $28.0 million in net property and equipment which was more than offset by a $33.7 million increase in long-term debt. Restricted net position decreased by $7.2 million primarily because capital funding collections from the airlines were greatly reduced. The decrease in unrestricted net position of $6.8 million was primarily due to the $28.6 million increase in the net pension liability which was offset by a $16.7 million increase in deferred pension outflows.

The $27.0 million increase in unrestricted current assets is directly related to a $12.6 million increase in grants due from federal, state and local governments and the receipt of $12.4 million in gaming revenues.

Capital Asset and Debt Administration

Capital Assets - The Authority's capital assets, net of depreciation, as of December 31, 2020 and 2019, amounted to $674.1 million and $646.1 million respectively. The capital assets include land and land improvements (including runways and taxiways); buildings and building improvements; equipment, furniture and fixtures; as well as construction in progress. The total increase in the Authority's capital assets before accumulated depreciation for 2020 was 0.6%.

Major capital projects in progress and expenditures incurred during 2020 included the following:

Terminal modernization program	$53.6 million
Innovation campus development	$1.7 million
Airfield area projects	$4.1 million

Major capital projects in progress and expenditures incurred during 2019 included the following:

Terminal modernization program	$68.9 million
Innovation campus development	$6.4 million
Airfield area projects	$3.9 million

Capital asset acquisitions are capitalized at cost and depreciated using the straight-line method. Acquisitions are funded using a variety of financing techniques, including federal grants, state grants, PFCs, debt issuance and cost recovery through airline rates and charges. Major commitments include $69.6 million for TMP program management, design and construction and $48.4 million for multiple other projects including airside terminal rehabilitation, snow removal equipment and development area projects. Further detailed information on the Authority's capital assets can be found in Note 5 to the financial statements.

Debt Administration - As of December 31, 2020 and 2019, the Authority's long-term debt outstanding totaled $76.8 million and $43.1 million, respectively. As previously mentioned, all outstanding bond debt was defeased on December 18, 2019. The outstanding debt as of December 31, 2020 consists primarily of draws from a line of credit. In March 2020, Fitch withdrew its ratings on all Allegheny County Airport Authority bonds as they were defeased. Detailed information regarding the Authority's long-term debt can be found in Note 6 to the financial statements.

Requests for Information

This financial report is designed to provide a general overview of the Authority's finances and to demonstrate the Authority's accountability for the funds it receives and expends. Questions concerning any of the information provided in this report or requests for additional information should be addressed in writing to the Authority's Chief Financial Officer, Pittsburgh International Airport, Landside Terminal, 4th Floor Mezz., Pittsburgh, PA 15231-0370 or via the "Contact Us" area of the Authority's website at www.flypittsburgh.com.

Statement of Net Position

December 31, 2020

Assets	
Current assets:	
Cash and cash equivalents (Note 3)	$ 31,178,979
Investments (Note 3)	60,209,350
Receivables:	
Trade receivables	5,120,965
Due from County of Allegheny, Pennsylvania (Note 11)	481,236
Due from other governments	15,397,521
State gaming receivable	12,400,000
Gas drilling receivable	724,905
Other receivables	1,177,220
Inventory	2,313,089
Restricted assets:	
Cash and cash equivalents (Note 3)	2,195,100
Investments (Note 3)	6,380,555
Accrued interest receivable	7,393
Passenger and customer facility charge receivable	653,969
Total current assets	138,240,282
Noncurrent assets:	
Restricted assets - Investments (Note 3)	32,860,165
Capital assets: (Note 5)	
Assets not subject to depreciation	285,686,315
Assets subject to depreciation - Net	388,438,393
Prepaid debt issuance costs	486,101
Long-term lease receivable	1,350,000
Total noncurrent assets	708,820,974
Total assets	847,061,256
Deferred Outflows of Resources - Deferred pension costs (Note 8)	35,721,134
Liabilities	
Current liabilities:	
Accounts payable	8,742,588
Due to County of Allegheny, Pennsylvania (Note 11)	1,299,759
Payables from restricted assets:	
Accounts payable	7,090,956
Accrued liabilities	465,446
Retainage payable	772,869
Other liabilities	907,746
Unearned revenue	5,645,073
Accrued liabilities and other	6,027,568
Total current liabilities	30,952,005
Noncurrent liabilities:	
Long-term debt (Note 6)	76,822,324
Net pension liability (Note 8)	127,357,162
Unearned revenue	2,287,200
Other noncurrent liabilities	3,726,623
Total noncurrent liabilities	210,193,309
Total liabilities	241,145,314
Deferred Inflows of Resources - Deferred pension cost reductions (Note 8)	5,774,717
Net Position	
Net investment in capital assets	595,209,963
Restricted:	
Capital projects	32,852,772
Debt service	7,393
Unrestricted	7,792,231
Total net position	**$ 635,862,359**

See notes to financial report.

Statement of Revenue, Expenses, and Changes in Net Position

	Year Ended December 31, 2020
Operating Revenue	
Landing fees	$ 11,842,189
Terminal area airline rentals and fees	35,314,364
Other aeronautical revenue	8,797,493
Parking revenue	13,711,988
Rental car revenue	7,933,045
Terminal concessions	8,281,487
Other nonaeronautical revenue	9,088,397
Allegheny County Airport revenue	2,542,728
Total operating revenue	97,511,691
Operating Expenses	
Salaries, wages, and benefits	54,764,544
Utilities	9,086,233
Cleaning and maintenance services	18,171,130
Professional services	24,662,534
Other	11,218,139
Allegheny County Airport expenses	2,504,576
Depreciation	60,417,786
Total operating expenses	180,824,942
Operating Loss	(83,313,251)
Nonoperating Revenue (Expense)	
Investment income	725,293
Gain on sale of assets	1,550,691
Customer facility charges	4,585,923
Passenger facility charges	6,945,191
Gaming act revenue	12,400,003
Gas drilling revenue	5,559,879
Grant revenue	13,091,912
Interest expense	(881,263)
Net decrease in fair value of investments	(113,508)
Other nonoperating revenue	263,582
Other nonoperating expense	(318,579)
Total nonoperating revenue	43,809,124
Income - Before capital contributions	(39,504,127)
Capital Contributions - Capital grants	19,962,114
Change in Net Position	(19,542,013)
Net Position - Beginning of year	655,404,372
Net Position - End of year	**$ 635,862,359**

See notes to financial report.

Statement of Cash Flows

	Year Ended December 31, 2020
Cash Flows from Operating Activities	
Receipts from customers and users	$ 99,981,010
Payments to suppliers for goods and services	(66,689,094)
Payments to employees and fringes	(42,164,387)
Net cash and cash equivalents used in operating activities	(8,872,471)
Cash Flows from Noncapital Financing Activities	
Gaming Act receipts	12,400,000
Gas drilling rent and royalty receipts	6,139,685
Grant revenue receipts	9,785,773
Other revenue	263,582
Net cash and cash equivalents provided by noncapital financing activities	28,589,040
Cash Flows from Capital and Related Financing Activities	
Receipt of capital grants and contributions	11,396,055
Proceeds from sale of capital assets	2,750,000
Purchase of capital assets	(89,646,111)
Interest and other charges paid, long-term debt, and related items	(881,263)
Debt service charge	(268,045)
Net drawdowns on lines of credit and BIOS loan	33,674,090
Passenger facility charges collected	6,382,756
Customer facility charges collected	4,128,457
Net cash and cash equivalents used in capital and related financing activities	(32,464,061)
Cash Flows from Investing Activities	
Interest received on investments	812,403
Purchases of investment securities	(8,557,483)
Net cash and cash equivalents used in investing activities	(7,745,080)
Net Decrease in Cash and Cash Equivalents	(20,492,572)
Cash and Cash Equivalents - Beginning of year	53,866,651
Cash and Cash Equivalents - End of year	**$ 33,374,079**
Classification of Cash and Cash Equivalents	
Cash and cash equivalents	$ 31,178,979
Restricted cash and cash equivalents	2,195,100
Total cash and cash equivalents	**$ 33,374,079**

See notes to financial report.

	Year Ended December 31, 2020
Reconciliation of Operating Loss to Net Cash and Cash Equivalents from Operating Activities	
Operating loss	$ (83,313,251)
Adjustments to reconcile operating loss to net cash and cash equivalents from operating activities:	
Depreciation	60,417,786
Changes in assets and liabilities:	
Receivables	2,469,323
Inventories	89,808
Prepaid and other assets	1,019,901
Accounts payable	(2,156,191)
Net pension liability	27,283,963
Deferrals related to pension	(13,766,022)
Accrued and other liabilities	(917,788)
Total adjustments	74,440,780
Net cash and cash equivalents used in operating activities	**$ (8,872,471)**

See notes to financial report.

Note 1 - Nature of Business

Allegheny County Airport Authority (the "Authority") presently leases and operates the Pittsburgh International Airport (PIT or the "Airport") and the Allegheny County Airport (AGC) (collectively, the "Airport System"). The Authority's activities are commercial in nature and are intended to be self-sustaining. The Authority is a body corporate and politic existing under the laws of the Commonwealth of Pennsylvania pursuant to the Municipality Authorities Act of 1945, approved on May 2, 1945, P.L. 382, and subsequently amended by the Municipal Authority Act, Act 22 of 2001. The Authority was organized by the County of Allegheny, Pennsylvania (the "County") on June 17, 1999. On September 16, 1999, pursuant to an Airport Operation, Management and Transfer Agreement, and Lease between the County and the Authority (the "Transfer Agreement"), as amended, the County transferred and leased the Airport System to the Authority for an initial term of 25 years with two 25-year extension options exercisable at the option of the Authority. In connection with the Transfer Agreement, the County transferred to the Authority all of the County's rights, title, and interest in the property utilized by the County in connection with the Airport System. In addition, all contractual rights, obligations, and liabilities pertaining to the Airport System, including revenue and general obligation bonds issued by the County to finance construction and development of PIT, were transferred to the Authority by the County. Prior to the organization of the Authority, the operations were included in the County's Department of Aviation.

Board members of the Authority are appointed by the county executive, subject to confirmation by a majority of the County Council. The Authority's financial statements are presented as a component unit in the County's general purpose financial statements and Annual Comprehensive Financial Report. Given the relationship of the parties to the Transfer Agreement, no adjustments were made to the historical carrying values of the Airport System's assets and liabilities and net position. The accompanying financial statements reflect the financial position and results of operations of the Authority as of and for the year ended December 31, 2020.

Note 2 - Significant Accounting Policies

Accounting and Reporting Principles

The Governmental Accounting Standards Board (GASB) establishes standards for external financial reporting for state and local governments and components thereof. The Authority's net position is classified into three categories according to external restrictions or availability of assets for satisfaction of authority obligations. The Authority's net position is classified as follows:

- Net Investment in Capital Assets - This represents the Authority's total investment in capital assets - net of outstanding debt obligations related to those capital assets. To the extent debt has been incurred, but not yet expended for capital assets, such amounts are not included as a component of net investment in capital assets.
- Restricted Net Position - This includes resources for which the Authority is legally or contractually obligated to spend resources in accordance with restrictions imposed by external third parties.
- Unrestricted Net Position - Unrestricted net position represents resources derived from operations that may be used at the discretion of the board of directors for any purpose.

When both restricted and unrestricted resources are available for use, it is the Authority's policy to use restricted resources first and then unrestricted resources as they are needed.

Basis of Accounting

The Authority is accounted for as a single-purpose, business-type entity since its operations are financed and operated in a manner similar to a private business. The Authority's financial statements are presented on the economic resources measurement focus and the full accrual basis of accounting. Revenue is recorded when earned, and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows.

Note 2 - Significant Accounting Policies (Continued)

Revenue and Expenses

Revenue from airlines, concessionaires, lessees, and parking is reported as operating revenue. Operating expenses include the cost of administering the airport system, plus depreciation and amortization of capital assets. All revenue and expenses not meeting this definition are reported as nonoperating revenue and expenses or capital contributions and grants.

Revenue Recognition and Unearned Revenue

Airline Operating Agreement

Landing fees and terminal building lease rental revenue include amounts computed in accordance with the Airline Operating Agreement (AOA) between the Authority and those airlines serving PIT that sign this agreement (the "Signatory Airlines"). The AOA provides that the aggregate of airline fees and charges, together with other revenue, including nonairline revenue, for each fiscal year should be sufficient to pay the operating expenses of the cost centers included in the AOA and to make all deposits and payments under the bond indentures issued in connection with financings of capital projects for the Authority. The original term of the AOA expired on May 8, 2018. Prior to the expiration of the original AOA, the Authority amended and extended the agreement through December 31, 2019. The Authority and the Signatory Airlines recently agreed on a new AOA that covers the term of January 1, 2020 through December 31, 2021. Negotiations continue on a longer-term extension of this new AOA.

American Airlines, together with its affiliated commuter airlines, accounted for approximately 24 percent of total enplaned passengers at PIT in 2020. Southwest Airlines accounted for approximately 26 percent of total enplaned passengers at PIT in 2020. Revenue from American Airlines represents approximately 19 percent of PIT operating revenue in 2020. Revenue from Southwest Airlines represents approximately 11 percent of PIT operating revenue in 2020. No other airline represents more than 10 percent of operating revenue or 20 percent of total enplaned passengers.

Concession and Rental Car Revenue

Concession and rental car revenue is generally based on a fixed percentage of tenant revenue, subject to certain minimum monthly fees. Concessions are operated under the Master Lease Development and Concession Agreement (the "Master Lease"). The Master Lease was extended from its initial term through December 31, 2029. During 2020, the Authority's revenue-sharing percentage was 77 percent.

Parking Revenue

Parking revenue is derived from a third-party operator and is based on a fixed percentage of net revenue, as defined in the associated management agreement.

Gas Drilling Revenue

In February 2013, a lease was executed with CNX Gas Company LLC (CNX) for the exploration, drilling, and production of minerals, namely Marcellus Shale natural gas, on the properties of Pittsburgh International and Allegheny County airports. The Authority's contract includes approximately $45.1 million in nonrefundable bonus payments, which were accreted to nonoperating revenue during the initial five-year term (March 2013 through February 2018) of the lease. The lease term continues from year to year as long as any leased minerals are produced in paying quantities from the leased premises. During 2016, the Authority began receiving royalty revenue payments for gas production. Total royalty revenue approximated $5.2 million during 2020. The Authority has and continues to receive ground rent payments for underdeveloped acreage. During the year ended December 31, 2020, this revenue was approximately $346,000.

Note 2 - Significant Accounting Policies (Continued)

Passenger Facility Charges (PFCs)

On October 1, 2001, the airlines began collecting PFCs on qualifying enplaning passengers at PIT on behalf of the Authority. PFCs are fees imposed on enplaning passengers by airports to finance eligible airport-related projects that preserve or enhance safety, capacity, or security of the national air transportation system; fund noise mitigation at the airport; or furnish opportunities for enhanced competition between or among air carriers. Regulations have been promulgated by the Federal Aviation Administration (FAA) that enhance the eligibility of PFC usage to include, among other things, debt service payments. Both the fee imposed and the intended uses must be reviewed and approved by the FAA.

Previously, the Authority received approval to impose and use a $3.00 PFC. Effective December 1, 2004, the FAA approved an increase to the PFC, allowing the Authority to collect at the current maximum rate of $4.50. The project summary was approved by the FAA in its Record of Decision, dated July 2001, and subsequently amended through December 17, 2019, as follows:

Reimbursement for preapplication projects (to be applied to debt service)	$ 215,055,143
Safety and security-related projects	160,695,520
Environmental-related projects	82,427,857
Terminal development projects	107,613,676
Total	$ 565,792,196

The Authority has expended $338,896,798 on these projects through December 31, 2020.

PFC revenue is classified as nonoperating in the statement of revenue, expenses, and changes in net position and is restricted for capital improvements, debt service, and certain other uses approved by the FAA.

Customer Facility Charges (CFCs)

Beginning on June 1, 2011, the Authority began collecting CFCs from all rental car concessionaires that operate at PIT. CFC revenue is classified as nonoperating in the statement of revenue, expenses, and changes in net position. Such amounts are restricted for operating and maintenance expense, capital improvements, and debt service related to the rental car operation at the Airport or for any rental car-related purpose the Authority determines is a reasonable use of such funds.

The CFC fee is charged to each on-airport rental car concessionaire customer on a per transaction day basis. The CFC rate was increased to $5.50 effective November 1, 2018 and to $6.00 effective February 1, 2020. Also, at the request of the rental car companies, in April 2020, the Authority raised the cap on the number of days of collection from 7 to 30. Pursuant to the new rental car agreements, prior to DBO, CFCs equal to the first $5.00 per transaction day will be used to fund rental car-allocable project costs on a pay-as-you-go basis, and the remaining $1.00 in incremental CFCs will be used to fund up to $1 million in costs to realign service areas and up to $7 million to fund Terminal Modernization Program rental car tenant improvements.

Federal and State Grants

Outlays for airport capital improvements and, from time to time, certain airport operating expenses are subject to reimbursement from federal grant programs. Funds are also received for airport development from the State of Pennsylvania. Funding provided from government grants is considered earned as the related approved capital outlays or expenses are incurred and is recorded as a component of capital contributions and grants. Costs claimed for reimbursement are subject to audit and acceptance by the granting agency.

Note 2 - Significant Accounting Policies (Continued)

Tenant-financed Improvements

Unearned revenue also includes amounts funded by tenants of the Authority for certain capital assets. These unearned revenue amounts are being amortized to contribution revenue using the straight-line method over the depreciable lives of the related assets through credits to current rents payable.

Specific Balances and Transactions

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, demand deposits, and short-term investments (including restricted assets) with a maturity of three months or less when acquired. Cash equivalents at December 31, 2020 consisted of government investment pools, Treasury notes, and commercial paper.

Investments

Investments are reported at fair value or estimated fair value. Short-term investments are reported at cost, which approximates fair value. Changes in the fair value of investments are reported as nonoperating revenue in the statement of revenue, expenses, and changes in net position.

Inventories

Inventories are valued at cost, which is determined using the weighted-average method of accounting. Inventories are composed of construction-related materials and parts used for maintenance of facilities and equipment.

Capital Assets

Capital assets are defined by the Authority as assets with an initial individual cost of more than $5,000 and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated acquisition value at the date of donation. Costs incurred for major improvements are carried in construction in progress until the assets are placed in service or are available for use, whichever occurs first.

Capital assets are depreciated using the straight-line method over the following useful lives:

	Depreciable Life - Years
Terminal buildings	10-30
Airfield (runways/taxiways/deicing)	20
Site development	30-50
Parking garage/lots/etc.	15-40
Hangers	5-30
Roadways	10-20
Mobile and other equipment	10-20
Computer/Security equipment and systems	5-20
Utilities	10-40
Other assets	10-30
Other structures	10-30
Landing area - Non sub	20-50

Deferred Outflows/Inflows of Resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to future periods and will not be recognized as an outflow of resources (expense/expenditure) until then.

Note 2 - Significant Accounting Policies (Continued)

The Authority reports deferred outflows related to pension. See Note 8 for further details on pension deferred outflows.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to future periods and will not be recognized as an inflow of resources (revenue) until that time.

The Authority reports deferred inflows related to pension. See Note 8 for further details on pension deferred inflows.

Pension

The Authority participates in a single-employer defined benefit pension plan sponsored by the County, known as the Allegheny County Employees' Retirement System (the "Plan"). For reporting and accounting purposes, the Plan is treated as a cost-sharing multiple-employer defined-benefit plan, as the Plan covers both the Authority's and the County's employees. The Authority records a net pension liability for the difference between the total pension liability calculated by the actuary and the pension plan's fiduciary net position. For the purpose of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Allegheny County Employees' Retirement System Pension Plan and additions to/deductions from the pension plan's fiduciary net position have been determined on the same basis as they are reported by the pension plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value, except for money market investments and participating interest-earning investment contracts that have a maturity at the time of purchase of one year or less, which are reported at cost.

Compensated Absences (Vacation and Sick Leave)

It is the Authority's policy to permit employees to accumulate earned but unused sick and vacation pay benefits. Certain firefighters employed by the Authority earn vested sick benefits that are accrued for based on the estimated amount that the Authority will pay upon employment termination (current rates of compensation plus appropriate taxes); vacation pay is accrued based on assumptions concerning the probability that certain employees will become eligible to receive these benefits in the future.

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 and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ from those estimates.

Note 2 - Significant Accounting Policies (Continued)

Upcoming Accounting Pronouncements

In June 2017, the Governmental Accounting Standards Board issued Statement No. 87, *Leases*, which improves accounting and financial reporting for leases by governments. This statement requires 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. The Authority is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement were originally effective for the Authority's financial statements for the year ended December 31, 2020 but were extended to December 31, 2021 with the issuance of GASB Statement No. 95, *Postponement of the Effective Date of Certain Authoritative Guidance*.

In May 2019, the GASB issued Statement No. 91, *Conduit Debt Obligations*, which clarifies the existing definition of conduit debt, provides a single method of reporting conduit debt obligations by issuers, and eliminates diversity in practice associated with commitments extended by issuers, arrangements associated with conduit debt obligations, and related note disclosures. As a result, issuers should not recognize a liability for items meeting the definition of conduit debt; however, a liability should be recorded for additional or voluntary commitments to support debt service if certain recognition criteria are met. The standard also addresses the treatment of arrangements where capital assets are constructed or acquired with the proceeds of a conduit debt obligation and used by a third-party obligor. The provisions of this statement were originally effective for the Authority's financial statements for the year ending December 31, 2021 but were extended to December 31, 2022 with the issuance of GASB Statement No. 95, *Postponement of the Effective Date of Certain Authoritative Guidance*.

In January 2020, the GASB issued Statement No. 92, *Omnibus 2020*. This statement addresses eight unrelated practice issues and technical inconsistencies in authoritative literature. The standard addresses leases, intraentity 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 Authority does not believe this pronouncement will have a significant impact on its financial statements but is still making a full evaluation.

In March 2020, the GASB issued Statement No. 93, *Replacement of Interbank Offered Rates*. With the London Interbank Offered Rate (LIBOR) expecting to cease existence in its current form at the end of 2021, this statement addresses accounting and financial reporting implications that result from the replacement of an interbank offered rate (IBOR) in hedging derivative instruments and leases. The removal of LIBOR as an appropriate benchmark interest rate for a hedging derivative instrument is effective for the Authority's financial statements for the December 31, 2022 fiscal year. All other requirements of the statement are effective for the Authority's financial statements for the December 31, 2021 fiscal year. Lease modification requirements are effective one year later.

In March 2020, the GASB issued Statement No. 94*, Public-Private and Public-Public Partnerships and Availability Payment Arrangements*, to bring a uniform guidance on how to report public-private and public-public partnership arrangements. As a result, transferors in public-private or public-public arrangements will recognize receivables for installment payments; deferred inflows of resources; and, when applicable, capital assets. Operators will recognize liabilities for installment payments and intangible right-to-use assets and, when applicable, deferred outflows of resources and liabilities for assets being transferred. This statement also provides guidance for accounting and financial reporting for availability payment arrangements, in which a government compensates an operator for services such as designing, constructing, financing, maintaining, or operating an underlying asset for a period of time in an exchange or exchange-like transaction. The provisions of this statement are effective for the Authority's financial statements for the year ending December 31, 2023.

Note 2 - Significant Accounting Policies (Continued)

In May 2020, the Governmental Accounting Standards Board issued Statement No. 96, *Subscription-Based Information Technology Arrangements (SBITAs)*, which defines SBITAs and provides accounting and financial reporting for SBITAs by governments. This statement requires a government to recognize a subscription liability and an intangible right-to-use subscription asset for SBITAs. The Authority is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement are effective for the Authority's financial statements for the year ending December 31, 2023.

In June 2020, the Governmental Accounting Standards Board issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans*. While this standard had certain aspects impacting defined contribution pension and OPEB plans and other employee benefit plans that were effective immediately, it also clarifies when a 457 should be considered a pension plan or an other employee benefit plan to assist in the application of GASB Statement No. 84 to these types of plans. The Authority is currently evaluating the impact this standard will have on the financial statements when adopted. The provisions of this statement related to 457 plans are effective for the Authority's financial statements for the year ending December 31, 2022.

Subsequent Events

The financial statements and related disclosures include evaluation of events up through and including March 31, 2021, which is the date the financial statements were available to be issued.

Note 3 - Deposits and Investments

Deposits and investments are reported in the financial statements as follows:

Cash and cash equivalents	$ 31,178,979
Investments	60,209,350
Restricted cash and cash equivalents	2,195,100
Restricted investments	39,240,720
Total deposits and investments	$ 132,824,149

These amounts are classified into the following deposit and investment categories:

Deposits with financial institutions	$ 29,276,266
Investments:	
Reported at cost - Investment pool - Federated government obligations fund	498,647
Reported at fair value:	
Commercial paper	16,294,228
Treasury notes	86,755,008
Total	$ 132,824,149

Note 3 - Deposits and Investments (Continued)

The Authority's investment policy is to follow Section 5611 of the Commonwealth of Pennsylvania Municipality Authorities Act and Act 131 of 2014 (Section 2) (collectively the "Acts"). In accordance with the Acts, the Authority is authorized to invest in (1) U.S. Treasury bills; (2) short-term obligations of the U.S. government or its agencies or instrumentalities; (3) obligations of the United States of America or any of its agencies or instrumentalities backed by the full faith and credit of the United States of America, the Commonwealth of Pennsylvania (the "Commonwealth") or any of its agencies or instrumentalities backed by the full faith and credit of the Commonwealth, or any political subdivision of the Commonwealth or any of its agencies or instrumentalities backed by the full faith and credit of the political subdivision; (4) commercial paper rated in the highest rating category, without reference to a subcategory, by a rating agency; and (5) shares of an investment company registered under the Investment Company Act of 1940 whose shares are registered under the Securities Act of 1933 if the only investments of that company are in the authorized investments for authority funds listed (1) through (4) above.

Commonwealth of Pennsylvania law requires that the Authority's deposits be placed in savings accounts, time deposits, or share accounts of institutions insured by the Federal Deposit Insurance Corporation (FDIC), the Federal Savings and Loan Insurance Corporation, or the National Credit Union Insurance Fund. To the extent that such accounts are so insured, and for any amounts above the insured maximum, the approved collateral, as provided by law, shall be pledged by the depository.

The Authority has designated four banks for the deposit of its funds. The Authority's deposits and investments are in accordance with statutory authority and the adopted investment policy.

There are no limitations or restrictions on participant withdrawals for the investment pools that are recorded at amortized cost.

The Authority's cash and investments are subject to several types of risk, which are examined in more detail below:

Custodial Credit Risk of Bank Deposits

Custodial credit risk is the risk that, in the event of a bank failure, the Authority's deposits may not be returned to it. The Authority's cash deposits are insured up to $250,000 at financial institutions insured by the FDIC. Any cash deposits in excess of the $250,000 FDIC limits are uninsured and collateralized by financial institutions via single collateral pool arrangements, as permitted by Act No. 72 of the 1971 session of the Pennsylvania General Assembly, for the protection of public depositors. At December 31, 2020, the Authority had $28,932,295 of bank deposits that were uninsured but collateralized.

Custodial Credit Risk of Investments

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At December 31, 2020, the Authority's investments were not exposed to custodial credit risk. The Authority's investments are held by the pledging financial institution's trust department or agent in the Authority's name. The Authority's investment policy does not address how investment securities and securities underlying repurchase agreements are to be held.

Interest Rate Risk

Interest rate risk is the risk that the value of investments will decrease as a result of a rise in interest rates. The Authority does not have an investment policy that manages exposure to fair value losses arising from rising interest rates.

Note 3 - Deposits and Investments (Continued)

At December 31, 2020, the Authority had the following investments and maturities:

Type of Investment	Carrying Value	Less Than 1 Year
Investment pool - Federated government obligations fund	$ 498,647	$ 498,647
Commercial paper	16,294,228	16,294,228
Treasury notes	86,755,008	86,755,008
Total	$ 103,547,883	$ 103,547,883

Credit Risk

Credit risk is the risk that the issuer or other counterparty to an investment will not fulfill its obligations. The Act provides for investment of governmental funds into certain authorized investment types. Statutes do not prescribe regulations related to demand deposits; however, they do allow pooling of governmental funds for investment. The Authority has no investment policy that would further limit its investment choices. The deposit and investment policy of the Authority adheres to state statutes, related trust indentures, and prudent business practices. As of December 31, 2020, the credit quality ratings of investments are as follows:

Investment	Carrying Value	Standard & Poor's	Moody's
Investment pool - Federated government obligations fund*	$ 498,647	AAA	Aaa
Commercial paper	16,294,228	A-1	P-1
Treasury notes	86,755,008	AAA	Aaa
Total	$ 103,547,883		

*Investment is valued at amortized cost rather than fair value.

Concentration of Credit Risk

The Authority's investment policy places no limit on the amount the Authority may invest in any one issuer. At December 31, 2020, the Authority does not have any investments subject to concentration of credit risk.

Foreign Currency Risk

Foreign currency risk is the risk that an investment denominated in the currency of a foreign country could reduce its U.S. dollar value as a result of changes in foreign currency exchange rates. The Authority's exposure to foreign currency risk derives from its investments in commercial paper issued by Canadian, Asian, and other foreign corporations. The Authority's investment policy permits it to hold commercial paper rated in the highest rating category, without reference to a subcategory, by a rating agency. At December 31, 2020, the Authority's investment in commercial paper of foreign currencies matured in less than one year and had a fair value of $12,286,427.

Fair Value Measurements

The Authority categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets, Level 2 inputs are significant other observable inputs, and Level 3 inputs are significant unobservable inputs. Investments that are measured at fair value using net asset value per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy below.

Note 3 - Deposits and Investments (Continued)

In instances where inputs used to measure fair value fall into different levels in the above fair value hierarchy, fair value measurements in their entirety are categorized based on the lowest level input that is significant to the valuation. The Authority's assessment of the significance of particular inputs to these fair value measurements requires judgment and considers factors specific to each asset.

The Authority has the following recurring fair value measurements as of December 31, 2020:

	Assets Measured at Carrying Value on a Recurring Basis at December 31, 2020			
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Balance at December 31, 2020
Investments by Fair Value Level				
U.S. Treasury securities	$ 86,755,008	$ -	$ -	$ 86,755,008
Commercial paper	-	16,294,228	-	16,294,228
Total investments by fair value level	$ 86,755,008	$ 16,294,228	$ -	$ 103,049,236

Securities classified in Level 1 are valued using prices quoted in active markets for those securities.

Where quoted market prices are available in an active market, securities are classified within Level 1 of the valuation hierarchy. If quoted market prices are not available, then fair values are estimated by using quoted prices of securities with similar characteristics or independent asset pricing services and pricing models, the inputs of which are market-based or independently sourced market parameters, including, but not limited to, yield curves, interest rates, volatilities, prepayments, defaults, cumulative loss projections, and cash flows. Such securities are classified in Level 2 of the valuation hierarchy. In certain cases where Level 1 and Level 2 inputs are not available, securities are classified within Level 3 of the hierarchy.

Note 4 - Restricted Assets

At December 31, 2020, restricted assets are composed of the following:

Passenger and customer facility charge receivables	$ 653,969
Airport system capital fund	23,460,285
Equipment and capital outlay fund	2,658,812
Deposits held for others	758,053
Customer facility charges fund	12,463,063
Other	2,103,000
Total	$ 42,097,182

Under the AOA, the Authority must also maintain certain funds and accounts (as therein defined). The AOA further requires the use of a cost-center structure. In general, revenue from all cost centers is pledged to the payment of the Authority's revenue bonds. However, future debt service on the TMP will be charged to the terminal cost center exclusively.

The Passenger Facility Charge Fund provides for the segregation of PFC receipts, as required by the FAA. Such revenue is to be expended only for allowable capital projects or to repay debt issued for allowable capital projects, under a record of decision granted by the FAA.

All other restricted funds and accounts (including those established under the AOA) of the Authority represent amounts held for customer facility charge fund expenditures, specific capital projects, or deposits held on behalf of others.

Note 5 - Capital Assets

Capital asset activity of the year ended December 31, 2020 is as follows:

	Balance January 1, 2020	Reclassifications	Additions	Disposals and Adjustments	Transfers	Balance December 31, 2020
Capital assets not being depreciated:						
Land	$ 112,522,795	$ 107,977	$ -	$ -	$ -	$ 112,630,772
Construction in progress	114,582,256	(31,170,561)	89,643,848	-	-	173,055,543
Subtotal	227,105,051	(31,062,584)	89,643,848	-	-	285,686,315
Capital assets being depreciated:						
Terminal buildings	720,510,822	5,945,673	-	-	-	726,456,495
Airfield (runways, taxiways, and deicing)	192,750,467	7,872,586	-	-	-	200,623,053
Site development	78,082,183	-	-	-	-	78,082,183
Parking garage and lots	121,607,653	302,852	-	-	-	121,910,505
Hangers	48,197,958	868,639	-	(1,005,785)	-	48,060,812
Other structures	207,786,276	810,090	-	-	-	208,596,366
Roadways	71,032,243	391,745	-	-	-	71,423,988
Mobile and other equipment	52,666,060	1,913,305	-	(693,582)	-	53,885,783
Computer and security equipment/systems	60,829,096	2,195,535	-	-	-	63,024,631
Utilities	50,423,333	446,207	-	-	-	50,869,540
Other assets	22,625,595	9,595,126	-	-	-	32,220,721
Landing area (non sub)	417,145,840	720,826	-	(74,664,263)	-	343,202,403
Subtotal	2,043,657,526	31,062,584	-	(76,363,630)	-	1,998,356,480
Accumulated depreciation:						
Terminal buildings	633,224,589	20,013	17,626,140	-	-	650,870,742
Airfield (runways, taxiways, and deicing)	103,814,047	(20,013)	9,164,947	-	-	112,958,981
Site development	47,404,590	-	1,750,183	-	-	49,154,773
Parking garage and lots	82,830,619	-	5,166,952	-	-	87,997,571
Hangers	41,701,982	-	646,085	(29,358)	-	42,318,709
Other structures	126,642,234	(615,892)	7,625,285	-	-	133,651,627
Roadways	62,566,484	-	798,443	-	-	63,364,927
Mobile and other equipment	38,070,007	1,446,062	2,315,282	(693,582)	-	41,137,769
Computer and security equipment/systems	43,998,573	-	3,047,713	-	-	47,046,286
Utilities	43,733,297	-	1,380,482	-	-	45,113,779
Other assets	17,566,564	615,892	3,026,002	-	-	21,208,458
Landing area (non sub)	383,113,899	(1,446,062)	7,870,272	(74,443,644)	-	315,094,465
Subtotal	1,624,666,885	-	60,417,786	(75,166,584)	-	1,609,918,087
Net capital assets being depreciated	418,990,641	31,062,584	(60,417,786)	(1,197,046)	-	388,438,393
Net business-type activities capital assets	$ 646,095,692	$ -	$ 29,226,062	$ (1,197,046)	$ -	$ 674,124,708

Note 5 - Capital Assets (Continued)

Construction Commitments

Construction in progress related to runway and taxiway rehabilitation, garage and parking lots, terminal enhancements, nonairfield property development, and terminal modernization program. As of December 31, 2020, the Authority's equipment purchases and construction commitments are as follows:

	Spent to Date	Remaining Commitment
Terminal Modernization Project	$ 140,049,482	$ 69,597,213
Airside terminal projects	2,167,180	4,451,967
Development area projects	16,324,232	6,762,210
Snow removal equipment	-	5,793,955
Other projects	84,001,573	10,273,505
Total	$ 242,542,467	$ 96,878,850

Inexhaustible Assets

The Authority maintains various collections of inexhaustible assets to which no value can be determined. Such collections could include contributed works of art, historical treasures, literature, etc. that are held for exhibition and public service. These collections are neither disposed of for financial gain nor encumbered in any means. Accordingly, such collections are not capitalized or recognized for financial statement purposes.

Note 6 - Long-term Debt

Long-term debt activity for the year ended December 31, 2020 can be summarized as follows:

Lines of Credit - Direct Borrowings

On December 18, 2019, the Authority negotiated a new line of credit from the bank. This was the First Supplemental Trust Indenture under the new Master Trust Indenture. The term of the line is for three years, and the initial maturity date is December 18, 2022. The initial interest rate was 79 percent of the daily LIBOR plus an initial spread of 48 basis points. This loan agreement was amended by a first amendment dated May 12, 2020 and a second amendment dated December 30, 2020. Commencing on June 1, 2020, the interest rate is 79 percent of the daily LIBOR plus an initial spread of 114 basis points. The revised maximum commitment as of December 30, 2020 through the initial maturity date is $150,000,000. The funds are to be used to pay for costs of the Authority's Terminal Modernization Project. The security for repayment of the loan is a subordinate lien on the net revenue per the new Master Trust Indenture. Interest paid in 2020 on the line of credit was $739,332. The balance of this line of credit was $74,680,519 at December 31, 2020.

BIOS Loan

On June 20, 2020, the Authority entered into an agreement with the PA Department of Community & Economic Development for a Business in Our Sites (BIOS) loan in the amount of $6 million. This loan will be used to advance land development at the Neighborhood 91 site. The Authority has drawn down $2,141,805 as of December 31, 2020. Per modified payment terms of the note, upon the lease of any portion of the site, interest will begin to accrue at 2 percent; however, principal and interest will not be due until a minimum of 25 percent of the site is leased or the fifth anniversary of the effective date, whichever comes first. As of December 31, 2020, no tenant has started a lease.

Note 6 - Long-term Debt (Continued)

Pledged Revenue from Airport Operations

The principal, interest, and redemption premiums, if any, related to bonds authorized and issued under the provisions of the Master Indenture and Supplemental Indentures are payable by the Authority only out of net revenue (as defined) and from such other moneys as may be available for such purpose. Bonds authorized and issued do not constitute a legal or equitable pledge, charge, lien, or encumbrance upon any of the Authority's properties, including PIT, or upon any of its income or receipts of revenue, except as noted above. The holders of the revenue bonds have no claim upon the taxing power or tax revenue of the County.

As required by the Master Indenture, the Authority must attain a debt service coverage ratio of 1.25, as well as meet other nonfinancial covenants. As of December 31, 2020, amounts available to pay debt service charges were approximately $22 million. There was no required principal and interest debt service per the terms of the Master Indenture for the year ended December 31, 2020.

The Authority's ability to derive net revenue from operations depends upon various factors, many of which are not within the control of the Authority. The primary source of net revenue is the Airline Operating Agreement between the Authority and the Signatory Airlines. The AOA provides for the landing fees, terminal rentals, and ramp fees to be charged to the airlines. In addition, the Signatory Airlines are obligated to pay costs associated with aircraft support systems and tenant improvements.

At any point in time, the U.S. economy, excess airline capacity, and industrywide competition through airfare discounting may create significant constraints on the operations of the airlines. Due to these factors, the financial results of the Authority are largely dependent upon conditions in the national economy and the U.S. airline industry and the financial condition of air carriers serving the Authority.

Other Pledges of Revenue

In 2005, the Authority entered into a series of agreements surrounding the development and financing of certain land owned by the Authority to be known as the Clinton Industrial Park. As part of this endeavor, a funding and development agreement was signed with the Redevelopment Authority of Allegheny County (RAAC) to provide tax increment financing (TIF) for the project. The RAAC originally issued TIF notes in the amount of $5,000,000 (the "2005 TIF Notes") to a single lender, and, in July 2015, the lender refinanced the notes. The refinanced notes totaled $3,786,718 and carry an annual interest rate of 2.75 percent with a maturity date of June 1, 2025. These notes are a limited obligation of the RAAC and are generally payable from two sources. The first source is 100 percent of the tax increment revenue pledged by the local taxing authorities. The second source is the Authority's pledge of 75 percent of gross revenue from the leasing of the property. All amounts pledged in this agreement are maintained in separate trust accounts under the direction of the trustee, U.S. Bank, National Association. As principal payments are due to the lender, the trustee makes the payments from the trust accounts. At December 31, 2020, the TIF notes' balance was $1,991,718, and the corresponding trust accounts contained $1,657,112. As additional security and credit enhancement, the Commonwealth Financing Authority has agreed to guarantee the payment of the TIF notes. While the Authority has pledged to assign certain of its revenue to the trustee for the satisfaction of the TIF notes, the Authority is not party to the respective trust indentures and is under no obligation to repay the TIF notes; therefore, the TIF notes are not reflected as liabilities of the Authority in these financial statements. Revenue from the leasing of the property is reported net of any pledged amounts remitted according to this agreement.

Note 6 - Long-term Debt (Continued)

In 2008, the Authority entered into a series of agreements surrounding the development and financing of certain land owned by the Authority to be known as the Northfield Site, Phase I. As part of this endeavor, a funding and development agreement was signed with the RAAC to provide tax increment financing for the project. The RAAC originally issued TIF notes in the amount of $5,000,000 (the "2008 TIF Notes") to a single lender, and, in December 2015, the lender refinanced the notes. The refinanced notes totaled $4,577,000 and carry an annual interest rate of 4.5 percent, with a maturity date of December 1, 2028. These notes are a limited obligation of the RAAC and are generally payable from two sources. The first source is 75 percent of the tax increment revenue pledged by the local taxing authorities. The second source is the Authority's pledge of 75 percent of gross revenue from the leasing of the property. All amounts pledged in this agreement are maintained in separate trust accounts under the direction of the trustee, Wells Fargo Bank, National Association. As principal payments are due to the lender, the trustee makes the payments from the trust accounts. At December 31, 2020, the TIF notes balance was $3,250,904, and the corresponding trust accounts contained $1,596,180. As additional security and credit enhancement, the Commonwealth Financing Authority has agreed to guarantee the payment of the TIF notes. While the Authority has pledged to assign certain of its revenue to the trustee for the satisfaction of the TIF notes, the Authority is not party to the respective trust indentures and is under no obligation to repay the TIF notes; therefore, the TIF notes are not reflected as liabilities of the Authority in these financial statements. Revenue from the leasing of the property is reported net of any pledged amounts remitted according to this agreement.

Note 7 - Risk Management

The Authority is exposed to various risks of loss related to property loss, torts, errors and omissions, natural disasters, and employee injuries (workers' compensation), as well as medical benefits provided to employees. The Authority carries commercial insurance to cover these risks of loss. The commercial insurance coverage is on a guaranteed-cost basis covering any expense of the Authority. Settled claims have not exceeded this commercial coverage in any of the past three years. The range of deductibles is from $0 on aviation liability to a maximum of $100,000 on employees and officers and property insurance.

Note 8 - Pension Plan

Plan Description

The County sponsors the Allegheny County Employees' Retirement System (the "Retirement System"), a single-employer defined benefit pension plan that covers substantially all authority employees. As a component unit of the County, the Authority applies the cost-sharing pension plan accounting and reporting requirements for its stand-alone financial reports, as required by the GASB.

Benefit and contribution provisions for the Retirement System are determined under statutes enacted by the General Assembly of the Commonwealth of Pennsylvania. The Retirement System Board (the "Board") administers the Retirement System and consists of seven members: the county executive, the county controller, the county treasurer, two members elected by the county employees and retirees, one member appointed by the county executive, and one member appointed by the County Council. The Board, pursuant to express statutory authority, has the right to increase the employee contributions in the event it is actuarially determined that a contribution increase is required in order for the Retirement System to meet its funding requirements. Also, the obligation of the Retirement System to pay retirement benefits is further secured by a statutory obligation imposed upon the County to utilize its taxing authority to meet such obligation.

The Retirement System issues a publicly available financial report that includes financial statements and required supplementary information for the plan. A copy of the report may be obtained by writing to Allegheny County Employees’ Retirement System, 106 County Office Building, 542 Forbes Avenue, Pittsburgh, PA 15219 or obtaining online at www.alleghenycounty.us/retirement.

Note 8 - Pension Plan (Continued)

Benefits Provided

Monthly benefit payments are determined for each individual member according to the retirement option selected and the age and length of service at retirement. Under normal retirement, employees hired prior to February 21, 2014 (generally, attainment of age 60 with 20 years of service for nonuniformed employees), the retirement benefit is equal to 50 percent of final average salary plus 1 percent of final average salary for each full year of service between 20 and 40 years. Final average salary is the monthly average of the 24 highest months of compensation in the last 48 months of employment preceding retirement.

Act 125, signed into law on December 23, 2013, became effective 60 days later and applies to participating employees hired or rehired on or after February 21, 2014. Act 125 revises the Retirement System's vesting requirement from 8 to 10 years and the service requirement from 20 to 25 years. The determination of final average salary is changed to equal the monthly average of the highest 48 months of compensation out of the last 8 years of service. Additionally, overtime compensation is limited to 10 percent of base pay.

In addition to retirement benefits, the Retirement System also provides disability and survivor benefits. Any eligible employee who has completed at least 12 years of service and who was employed prior to attaining age 55 who becomes mentally incapacitated or totally and permanently disabled is eligible to receive a disability retirement benefit. There is no age requirement to receive this benefit. Additionally, any eligible employee may elect the spouse's benefit at any time prior to retirement. The election is irrevocable after attaining age 50. If this election is made, the surviving spouse shall be eligible to receive certain benefits, depending on the type of coverage selected.

Contributions

Beginning in 2014, authority employees were required to contribute 9.0 percent of covered compensation effective December 28, 2014 through December 31, 2017. Effective January 1, 2018, the contribution rate increased to 9.5 percent of covered compensation, and, subsequent to year end, the contribution rate increased again to 10.0 percent of covered compensation effective January 1, 2019. Employee contributions are matched equally by the County, as prescribed by the Second Class County Code of the Commonwealth of Pennsylvania, and deposited in the Pension Trust Fund. The Board, pursuant to express statutory authority, has the right to increase or decrease the contribution rate in the event it is actuarially determined that a contribution change is required in order for the Board to meet its funding requirements. Employees with at least 24 months of service who terminate prior to satisfying the minimum service requirements for a retirement benefit are entitled to refunds of their contributions, plus interest thereon. Employees with less than 24 months of service who terminate prior to satisfying the minimum service requirements for a retirement benefit are entitled to refunds of their contributions only.

The annual required contribution for the current year was determined as part of an actuarial valuation as of January 1, 2020 and is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. For the year ended December 31, 2020, contributions to the pension plan from the Authority were $2,946,664 (or 10.0 percent of covered payroll). The Authority contributed all required amounts for the year ended December 31, 2020.

Note 8 - Pension Plan (Continued)

Net Pension Liability

At December 31, 2020, the Authority reported a liability of $127,357,162 for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2020, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of January 1, 2020, which used update procedures to roll forward the estimated liability to December 31, 2020. The Authority's proportion of the net pension liability was based on the wages reported by the Authority and County relative to the collective wages of the plan. This basis of allocation is consistent with the manner in which contributions to the pension plan are determined. At December 31, 2020, the Authority's proportion was 7.1843 percent, which was a decrease of 0.4324 percent from its proportion measured as of December 31, 2019.

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended December 31, 2020, the Authority recognized pension expense of $17,626,127.

At December 31, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Difference between expected and actual experience	$ 4,610,108	$ -
Changes in assumptions	30,278,108	715,991
Net difference between projected and actual earnings on pension plan investments	-	587,544
Changes in proportionate share or difference between amount contributed and proportionate share of contributions	832,918	4,471,182
Total	$ 35,721,134	$ 5,774,717

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Years Ending December 31	Amount
2021	$ 9,378,066
2022	7,670,708
2023	5,403,068
2024	5,402,983
2025	2,091,592
Total	$ 29,946,417

Actuarial Assumptions

The total pension liability in the December 31, 2020 actuarial valuation was determined using an inflation assumption of 2.75 percent; assumed salary increases (including inflation) of 3.25 - 5.75 percent; an investment rate of return (net of investment expenses) of 7.75 percent; and the RP-2000 Combined Healthy Annuitants Mortality Table (Base Year - 2010), with blue-collar adjustments and adjustments for mortality improvements based on Scale AA and RP-2000 Disabled Retirees Mortality Table, with no future improvement.

Note 8 - Pension Plan (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 3.80 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that authority contributions will be made at contractually required rates, actuarially determined (10 percent effective January 1, 2018). Based on those assumptions, in the January 1, 2020 valuation, the pension plan's fiduciary net position was projected to reach a depletion date in 2023. Therefore, in the determination of the discount rate, the long-term expected rate of return was applied through 2023 to projected benefit payments, and a municipal bond rate of 1.93 percent was applied to projected benefit payments thereafter to determine the total pension liability. For this purpose, the index used was the S&P Municipal Bond 20 Year High Grade Index as of December 31, 2020.

Investment Rate of Return

Best estimates of geometric real rates of return as of the December 31, 2020 measurement date for each major asset class included in the pension plan's target asset allocation, as disclosed in the investment footnote, are summarized in the following tables:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Domestic equity	16.50 %	7.50 %
International equity	16.50	8.50
Domestic bonds	29.50	2.50
Real estate	12.50	4.50
Alternative assets	25.00	5.25

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

The following presents the net pension liability of the Authority, calculated using the discount rate of 3.80 percent, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate:

	1 Percentage Point Decrease (2.80%)	Current Discount Rate (3.80%)	1 Percentage Point Increase (4.80%)
Authority's proportionate share of the net pension liability	$ 154,450,217	$ 127,357,162	$ 104,867,917

Pension Plan Fiduciary Net Position

Detailed information about the plan's fiduciary net position is available in the separately issued financial report. For the purpose of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pension, and pension expense, information about the plan's fiduciary net position and additions to/deductions from fiduciary net position have been determined on the same basis as they are reported by the plan. The plan uses the economic resources measurement focus and the full accrual basis of accounting. Investments are stated at fair value. Contribution revenue is recorded as contributions are due, pursuant to legal requirements. Benefit payments and refunds of employee contributions are recognized as expense when due and payable in accordance with the benefit terms.

Note 9 - Other Postemployment Benefit Plan

The Authority provides OPEB for all employees who meet eligibility requirements. The benefits are provided through the Authority's Postemployment Medical Benefits Plan (the "OPEB Plan"), a single-employer plan administered by the Authority. The plan provides reimbursement for medical benefits to eligible firefighter retirees hired before May 1, 2005 and their spouses. Benefits are provided upon the retiree's date of retirement. The retiree is responsible for any premium cost in excess of the defined benefit. Payments to the retirees are made on a reimbursement basis.

The OPEB Plan provides medical benefits for eligible firefighter retirees who were hired before May 1, 2005 and their spouses. Benefits are provided through a third-party insurer, and the cost of the benefits is split between the OPEB Plan and the retiree. The Authority covers 62.0 percent of the premiums at age 50, which increases 3.00 percent each year until the age of 65 when the retiree becomes eligible for Medicare and the benefits are terminated.

The Authority estimates the net OPEB liability (asset) using an actuarial valuation as of December 31, 2019 and, for the year ended December 31, 2020, concluded the net OPEB liability and related deferrals were not material to the Authority's financial statements.

Note 10 - Contingent Liabilities

The Authority is subject to various legal proceedings and claims that arise in the ordinary course of its business. The Authority believes that the amount, if any, of ultimate liability with respect to legal actions will be insignificant or will be covered by insurance.

In January 1998, the Pennsylvania Department of Environmental Protection (DEP) issued an Administrative Order to the Allegheny County Department of Aviation alleging violations of a January 1994 Consent Order and Adjudication (the "Consent Order") and violations of the Pennsylvania Clean Streams Law and Dam Safety Act at the Pittsburgh International Airport. The alleged violations have been resolved except for issues relating to DIW. The Authority continues to negotiate the DIW issue with DEP. In connection with these negotiations, the Authority agreed to construct a stormwater deicing treatment facility (the "Treatment Facility") and amended its NPDES permit renewal application to include discharges from the Treatment Facility when it is constructed. DEP prepared a draft NPDES renewal permit in 2010, and both the Authority and EPA submitted comments on the draft permit to DEP. In August 2020, DEP prepared a revised draft NPDES permit and published notice of the draft permit in the Pennsylvania Bulletin for public comment. The Authority again submitted comments, which DEP is considering. The Authority's comments include, inter alia, a request for additional time to update studies on DIW generation and treatment and to receive stream conditions, as these are now significantly outdated, and reconsideration of effluent limits based on inapplicable guidance regarding discharges to intermittent and ephemeral streams. As of the date of these financial statements, DEP has not issued a final NPDES renewal permit that would authorize discharge from the previously proposed Treatment Facility.

The Authority's bylaws obligate the Authority to indemnify the members of the Authority's board of directors for claims filed against them in their capacity as board members, as well as for costs of defense. The Authority maintains directors and officers liability insurance to insure the Authority against losses and claims for its indemnification obligations. During 2018, certain board members notified the Authority that they had been named as defendants in a lawsuit filed by certain investors against an airline that had previously operated at the Airport and requested indemnification by the Authority in accordance with the bylaws. One of the directors was dismissed from the case in 2020 and is no longer subject to liability in this matter for which the Authority would be responsible. The matter remains active as to a former board member, and the Authority is still subject to the indemnification obligations under the bylaws. Accordingly, during 2020, the Authority paid a portion of the legal fees incurred in connection with this litigation to the limited extent of its deductible and a small portion of the hourly rates.

Note 11 - Related Party Transactions

The Authority has entered into intergovernmental agreements with the County that provide for, among other things, contractual services for county police services, 911 services, and certain accounting and professional services. The Authority contracts the Allegheny County, Pennsylvania treasurer office to perform audit functions. During 2020, the Authority paid $6,000 to the county treasurer and $5,000 to the county controller. The Authority contracts with Allegheny County Police for public safety services at the airport. During 2020, the Authority had $11,246,591 of police expenses and paid $9,246,591 to the county police, due to the COVID-19 credit given to the Authority by the County.

In June 2017, the Authority entered into a 20-year lease agreement with the County for the 67,390 square foot property located at 150 Hookstown Grade Road, Coraopolis, PA 15108. The County repurposed the facility to become the Allegheny County Emergency Operations and 911 Center. The lease agreement requires the County to make monthly rental payments of $87,832 (after the application of rent credits) to the Authority upon occupancy. Rent credits will be granted to the County as a result of the following:

- Improvements made to the facility and funded by the County. All improvements to the facility will accrue to the benefit of the Authority and will be funded as follows:
  - $2,450,000 - Funded by the County
  - $1,550,000 - Funded by the Authority
  - All remaining - Funded by the County
- Certain operating expenses typically paid by lessors, but in this case, paid by the County. In the base year of the lease, these costs are estimated to be $76,825.

The Authority will pay for certain operating expenses of the facility, and these costs include utilities, janitorial costs, refuse collection, facility manager, routine building and parking lot maintenance, and landscaping costs. The Authority estimates that, in the base year of the lease, these costs will total $450,165. In 2020, actual costs were $931,401. The lease provides that any increase in the actual operating expense over the base year estimated total will be paid by the County. In subsequent years, if the actual operating costs paid by the Authority are less than the base year amount, the Authority will issue a rent credit to the County in the amount of the difference.

The lease provides for a refurbishment allowance of $673,390 to be paid by the Authority after year 10 of the lease.

In August 2018, the Authority signed an intergovernmental agreement designed to coincide with the 20-year term of the lease for the Allegheny County Emergency Operations and 911 Center. This agreement requires the Authority to pay the County for certain emergency response services totaling an estimated $514,910 in the base year and for the 19 following years. Furthermore, this agreement provides that the Authority will reimburse the County for certain capital equipment costs already incurred on behalf of the Authority totaling $1,187,744. These amounts will be reimbursed via monthly payments of $4,949 over the 20-year term of the agreement.

Both the lease and the intergovernmental agreement commenced on the first day of the month following the day that the County occupies the facility, which was February 1, 2019.

Required Supplemental Information

Required Supplemental Information
Schedule of the Authority's Proportionate Share of the Net Pension Liability
Allegheny County Employees' Retirement System

Last Seven Plan Years

Years Ended December 31

	2020	2019	2018	2017	2016	2015	2014
Authority's proportion of the net pension liability	7.18430 %	7.61670 %	7.70030 %	7.49320 %	7.48040 %	7.77210 %	7.26080 %
Authority's proportionate share of the net pension liability	$ 127,357,162	$ 98,796,640	$ 98,817,359	$ 81,391,583	$ 83,549,481	$ 48,915,429	$ 40,088,306
Authority's covered payroll	$ 29,466,640	$ 31,042,463	$ 30,916,747	$ 29,243,194	$ 28,239,219	$ 28,433,558	$ 26,486,921
Authority's proportionate share of the net pension liability as a percentage of its covered payroll	432.21 %	318.26 %	319.62 %	278.33 %	295.86 %	172.03 %	151.35 %
Plan fiduciary net position as a percentage of total pension liability	36.14 %	42.75 %	40.56 %	46.41 %	43.44 %	56.62 %	60.26 %

Notes to Schedule

Benefit Changes: None noted

Change of Assumptions: Decrease in discount rate from 5.22 at December 21, 2019 to 3.80 percent at December 31, 2020

Change of Assumptions: Decrease in discount rate from 5.31 percent at December 31, 2018 to 5.22 percent at December 31, 2019

The amounts presented for each fiscal year were determined as of December 31 (measurement date).

Note: 10 years of information is required to be disclosed and will be added as the information becomes available.

Required Supplemental Information
Schedule of Pension Contributions
Allegheny County Employees' Retirement System

Last Seven Fiscal Years

Years Ended December 31

	2020	2019	2018	2017	2016	2015	2014
Statutorily required contribution	$ 2,946,664	$ 3,104,246	$ 2,937,091	$ 2,631,887	$ 2,541,530	$ 2,559,020	$ 2,245,908
Contributions in relation to the statutorily required contribution	2,946,664	3,104,246	2,937,091	2,631,887	2,541,530	2,559,020	2,245,908
Contribution Excess	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Authority's Covered Payroll	$ 29,466,640	$ 31,042,463	$ 30,919,747	$ 29,243,194	$ 28,239,219	$ 28,433,558	$ 26,486,921
Contributions as a Percentage of Covered Payroll	10.00 %	10.00 %	9.50 %	9.00 %	9.00 %	9.00 %	8.48 %

The amounts presented for each fiscal year were determined as of December 31 (the Authority's most recent fiscal year end).

Note: 10 years of information is required to be disclosed and will be added as the information becomes available.

Statistical Section

Statistical Section Table of Contents

This part of the annual comprehensive financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Authority's overall financial health.

The statistical section is organized into the following main categories:

Financial trends

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time. (Tables I through II)

Revenue capacity

These schedules contain information to help the reader assess the Authority's most significant local revenue sources. (Tables III through V)

Debt capacity

These schedules present information to help the reader assess the affordability of the Authority's current level of outstanding debt and the Authority's ability to issue additional debt in the future. (Tables VI through VII)

Operating information

These schedules are intended to provide contextual information about the Authority's operations and resources in order for readers to understand and assess its economic condition. (Tables VIII through X and narrative section entitled *Capital Asset and Other Airport Information*)

Demographic and economic information

These schedules help the reader understand the environment within which the Authority's financial activities take place. (Table XI through XII)

Table I

Statements of Revenues, Expenses, and Changes in Net Position Information

Last Ten Fiscal Years
December 30, 2020

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Operating Revenues										
Landing fees	$ 11,842,189	$ 17,279,723	$ 15,251,639	$ 14,365,250	$ 13,470,508	$ 12,448,844	$ 14,361,523	$ 16,175,824	$ 17,143,051	$ 19,201,040
Terminal area airline rentals and fees	35,314,364	41,775,380	45,229,579	59,801,919	57,810,845	57,159,010	58,931,950	58,843,123	57,404,063	60,386,937
Other aeronautical revenue	8,797,493	8,908,660	11,164,643	8,820,789	8,633,244	8,695,472	19,765,780	8,361,062	8,303,814	8,088,975
Parking revenues	13,711,988	41,631,005	36,925,829	33,895,240	31,417,166	30,554,032	29,964,552	28,319,696	28,421,320	27,093,789
Rental car revenues	7,933,045	12,510,219	12,714,616	11,891,053	11,460,088	11,519,067	12,117,122	11,229,331	10,743,783	11,019,172
Terminal concessions	8,281,487	10,707,375	10,577,565	8,028,157	7,890,938	7,455,056	7,261,383	7,084,889	6,846,108	6,667,693
Other nonaeronautical revenue	9,088,397	8,938,623	8,194,466	7,166,081	6,203,074	6,414,724	5,975,443	6,472,957	7,210,668	7,096,012
Pittsburgh International Airport revenues	94,968,963	141,750,985	140,058,337	143,968,489	136,885,863	134,246,205	148,377,753	136,486,882	136,072,807	139,553,618
Allegheny County Airport revenues	2,542,728	2,811,510	3,025,549	3,049,570	2,995,960	2,980,767	2,948,259	2,791,541	2,977,693	2,933,006
Total operating revenues	97,511,691	144,562,495	143,083,886	147,018,059	139,881,823	137,226,972	151,326,012	139,278,423	139,050,500	142,486,624
Operating Expenses										
Salaries, wages, and benefits	54,764,544	53,700,238	54,194,079	48,904,569	47,003,628	39,943,997	38,706,910	37,787,004	35,922,495	34,316,615
Utilities	9,086,233	10,860,849	11,006,346	10,216,075	10,355,357	10,596,853	11,173,533	10,867,128	10,134,704	11,953,353
Cleaning and maintenance services	18,171,130	18,917,978	18,358,894	16,807,122	17,143,416	16,479,835	16,134,004	15,863,165	15,464,350	14,598,330
Professional services	24,662,534	23,445,358	23,374,131	20,818,792	18,949,222	17,468,184	16,392,772	15,203,481	17,386,131	16,026,779
Other	11,218,139	13,291,357	15,701,447	9,802,286	9,627,834	9,387,942	8,597,630	8,433,613	6,461,705	7,174,810
Pittsburgh International Airport expenses	117,902,580	120,215,780	122,634,897	106,548,844	103,079,457	93,876,811	91,004,849	88,154,391	85,369,385	84,069,887
Allegheny County Airport expenses	2,504,576	2,594,279	3,060,064	3,281,416	2,808,271	2,917,479	2,964,068	2,761,368	2,712,854	2,658,304
Depreciation	60,417,786	56,981,022	55,786,882	55,642,763	56,805,124	56,782,417	54,781,801	54,065,640	63,242,378	67,679,727
Total operating expenses	180,824,942	179,791,081	181,481,843	165,473,023	162,692,852	153,576,707	148,750,718	144,981,399	151,324,617	154,407,918
Income (Loss) From Operations	(83,313,251)	(35,228,586)	(38,397,957)	(18,454,964)	(22,811,029)	(16,349,735)	2,575,294	(5,702,976)	(12,274,117)	(11,921,294)

Table I

Statements of Revenues, Expenses, and Changes in Net Position Information (Continued)

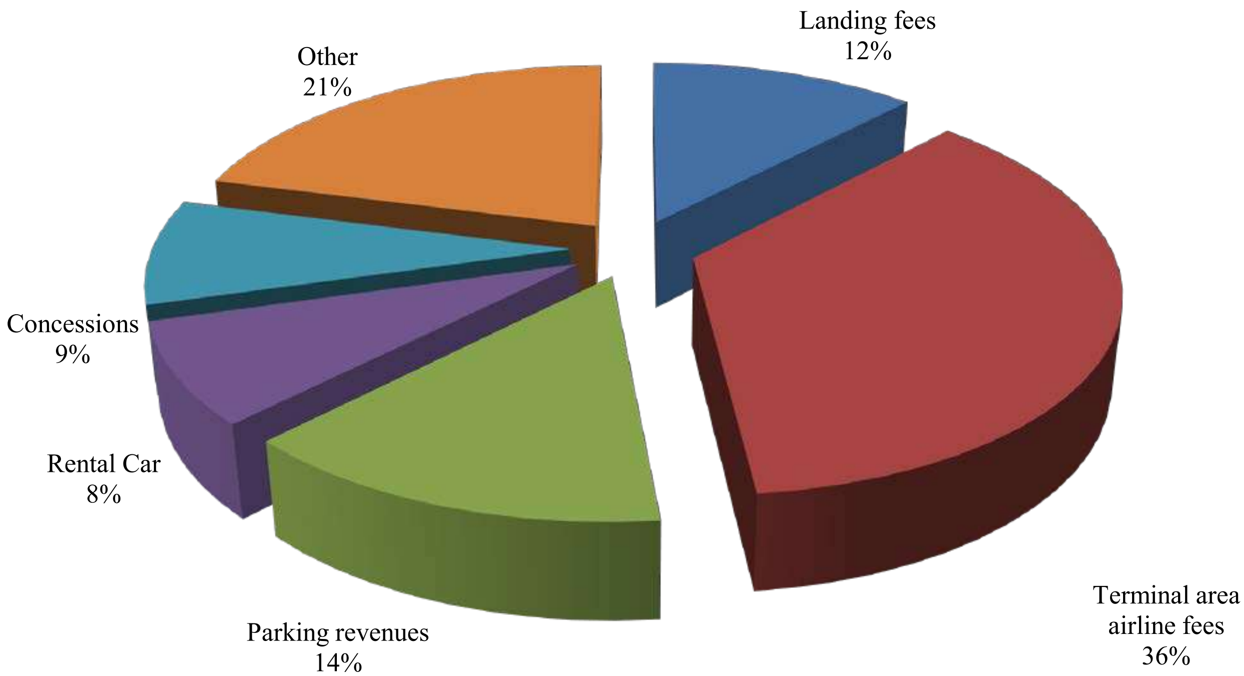
Last Ten Fiscal Years
December 30, 2020

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Nonoperating Revenue (Expense)										
Interest expense	$ (881,263)	$ (3,537,841)	$ (4,320,322)	$ (7,100,150)	$ (9,901,627)	$ (12,769,066)	$ (15,278,047)	$ (18,070,409)	$ (19,521,728)	$ (22,509,254)
Investment income	725,293	4,641,026	2,667,551	1,869,435	841,899	559,527	2,803,774	1,048,441	1,177,556	1,000,877
Customer facility charges	4,585,923	9,536,624	5,928,821	4,893,987	4,990,737	5,030,877	4,982,379	5,060,175	4,987,257	3,040,737
Passenger facility charges	6,945,191	18,979,556	19,023,229	17,794,862	16,176,674	15,856,825	15,561,599	15,546,574	16,208,155	16,920,897
Gain (loss) on disposal of capital assets	1,550,691	(7,732)	(12,504)	-	(1,088,113)	39,551	(10,499)	(45,525)	(11,928)	(1,526,932)
Swap termination gain			-	-	-	-	-	-	-	860,000
Gaming act revenues	12,400,003	12,400,000	8,000,000	8,000,000	12,400,000	12,400,000	12,400,000	12,400,000	12,400,000	12,400,000
Gas drilling revenues	5,559,879	10,121,571	19,266,592	25,983,025	13,918,971	10,192,316	9,072,202	7,143,289	-	-
Grant revenue	13,091,912									
Miscellaneous revenue	263,582	203,669	322,646	2,498,496	894,399	599,277	1,136,594	395,709	1,117,946	4,819,801
Miscellaneous expense	(318,579)									
Loss on in-substance debt defeasance	-	(3,635,528)								
Net increase (decrease) in fair value of investments	(113,508)	386,528	203,976	(483,433)	(49,040)	35,676	64,730	(9,173)	186,588	420,274
Total nonoperating income (expense)	43,809,124	49,087,873	51,079,989	53,456,222	38,183,900	31,944,983	30,732,732	23,469,081	16,543,846	15,426,400
Income (Loss) Before Capital Contributions and Grants	(39,504,127)	13,859,287	12,682,032	35,001,258	15,372,871	15,595,248	33,308,026	17,766,105	4,269,729	3,505,106
Capital Contributions and Grants	19,962,114	8,175,418	29,836,954	9,349,376	23,400,937	14,759,396	20,144,222	3,219,515	18,394,142	9,763,031
Increase (Decrease) in Net Position	(19,542,013)	22,034,705	42,518,986	44,350,634	38,773,808	30,354,644	53,452,248	20,985,620	22,663,871	13,268,137
Net Position, Beginning of Year, As Previously Reported	655,404,372	633,369,667	592,061,788	547,711,154	508,937,346	530,269,549	476,817,301	455,831,681	399,676,167	386,408,030
Change in Accounting Principle and Prior Period Adjustments (1)			(1,211,107)	-	-	(51,686,847)	-	-	33,491,643	-
Net Position, Beginning of Year, As Restated	655,404,372	633,369,667	590,850,681	547,711,154	508,937,346	478,582,702	476,817,301	455,831,681	433,167,810	386,408,030
Net Position, End of Year	$ 635,862,359	$ 655,404,372	$ 633,369,667	$ 592,061,788	$ 547,711,154	$ 508,937,346	$ 530,269,549	$ 476,817,301	$ 455,831,681	$ 399,676,167

(1) - Note that only 2018, 2015 and 2012 respective amounts have been restated for these items.

Operating Revenue by Category

For the Year Ended December 30, 2020



Operating Expenses by Business Unit

For the Year Ended December 30, 2020

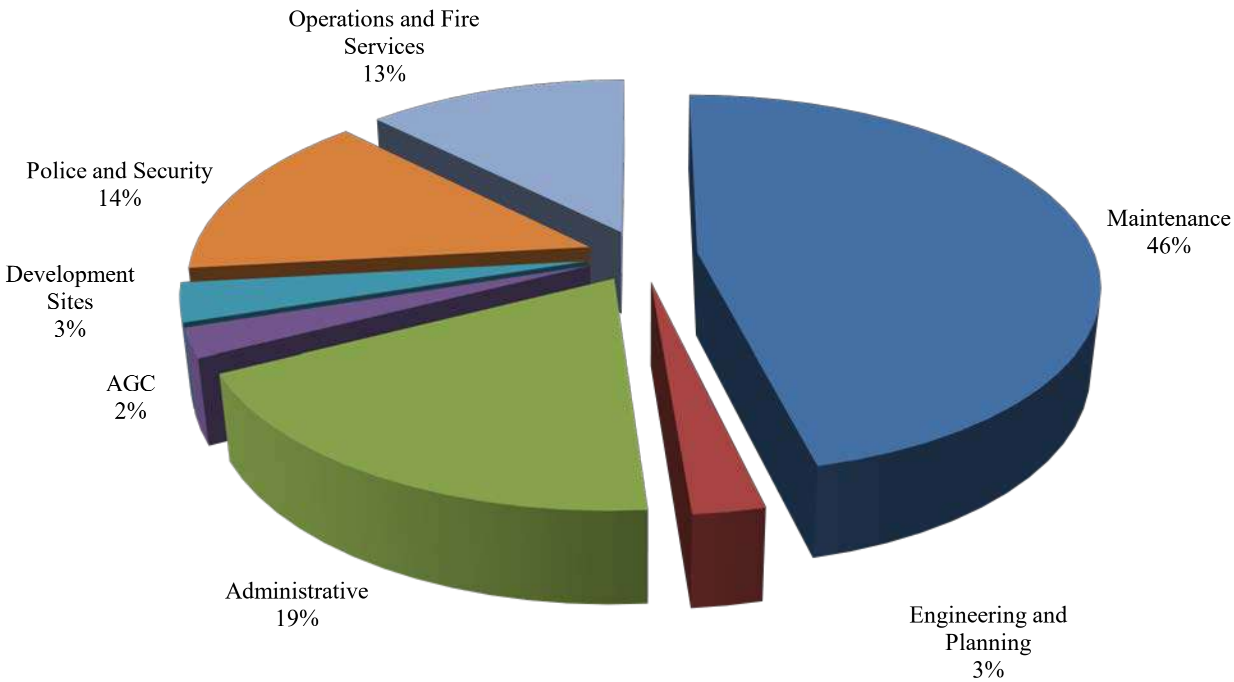


Table II
Net Position by Component
Last Ten Fiscal Years
December 30, 2020

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Net investment in capital assets	$ 595,209,963	$ 600,732,387	$ 537,519,690	$ 523,445,000	$ 492,846,022	$ 453,272,524	$ 432,654,829	$ 401,875,598	$ 389,895,553	$ 335,751,365
Restricted net position										
Capital	32,852,772	39,871,240	53,764,257	47,545,824	44,539,284	45,164,846	41,551,209	37,423,426	34,303,804	17,988,319
Debt service	7,393	208,207	17,261,196	19,718,004	19,458,747	19,978,735	19,685,858	19,840,923	19,768,112	58,418,174
Total restricted net position (expendable)	32,860,165	40,079,447	71,025,453	67,263,828	63,998,031	65,143,581	61,237,067	57,264,349	54,071,916	76,406,493
Unrestricted (deficit) net position	7,792,231	14,592,538	24,824,524	1,352,960	(9,132,899)	(9,478,759)	36,377,653	17,677,354	11,864,212	(12,481,691)
Total net position	$ 635,862,359	$ 655,404,372	$ 633,369,667	$ 592,061,788	$ 547,711,154	$ 508,937,346	$ 530,269,549	$ 476,817,301	$ 455,831,681	$ 399,676,167

Note: 2018 reflects the impact of adoption of GASB Statement 75. 2015 and forward reflects the impact of adoption of GASB Statement 68.

Table III
Summary of Airline Rate Base Fees

Last Ten Fiscal Years
December 30, 2020

Airline Group	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
American	$ 10,886,918	$ 13,218,040	$ 18,294,407	$ 26,777,240	$ 25,787,789	$ 25,847,593	$ 27,451,129	$ 28,674,840	$ 28,389,935	$ 30,954,582
Southwest	7,596,123	9,153,211	7,528,484	7,243,540	6,978,846	7,590,483	8,674,778	8,613,629	8,811,681	9,739,306
Delta	6,129,846	8,329,580	7,311,514	7,739,515	7,524,428	7,311,689	7,896,444	8,354,040	8,102,657	8,612,918
United	6,445,602	8,157,134	7,280,370	7,825,091	7,523,024	7,426,050	7,967,974	8,502,783	8,498,218	9,036,714
Other signatories	5,244,541	7,224,379	5,944,189	5,119,148	3,252,934	2,314,704	2,219,936	2,114,305	2,145,295	2,170,394
Total signatory airlines	36,303,030	46,082,344	46,358,964	54,704,534	51,067,021	50,490,519	54,210,261	56,259,597	55,947,786	60,513,914
Other passenger carriers	914,338	1,609,264	3,434,097	2,657,432	2,325,699	1,752,589	1,441,706	1,178,110	1,242,612	1,746,898
Total rate base fees <A>	$ 37,217,368	$ 47,691,608	$ 49,793,061	$ 57,361,966	$ 53,392,720	$ 52,243,108	$ 55,651,967	$ 57,437,707	$ 57,190,398	$ 62,260,812
Total rate base fees	$ 37,217,368	$ 47,691,608	$ 49,793,061	$ 57,361,966	$ 53,392,720	$ 52,243,108	$ 55,651,967	$ 57,437,707	$ 57,190,398	$ 62,260,812
Cargo landings and rents	2,357,515	1,983,312	1,785,438	1,648,031	1,612,284	1,495,458	1,622,521	1,622,009	1,710,552	1,802,355
Other terminal and hangar fees	15,378,934	16,316,709	20,067,362	23,977,962	24,909,592	24,564,760	35,784,767	24,320,792	23,949,979	23,613,785
Concession revenues	28,787,311	63,604,379	63,619,256	52,293,056	49,345,717	48,142,557	48,001,577	45,313,542	44,575,886	43,856,123
Other operating revenues	11,227,835	12,154,977	9,293,999	8,687,474	7,625,550	7,800,322	7,316,921	7,792,832	8,645,992	8,020,543
Total PIT operating revenues <B>	$ 94,968,963	$ 141,750,985	$ 144,559,116	$ 143,968,489	$ 136,885,863	$ 134,246,205	$ 148,377,753	$ 136,486,882	$ 136,072,807	$ 139,553,618

<A> Includes both signatory and nonsignatory landing, terminal, and ramp fees, as well as gate usage fees for all fiscal years.
<B> PIT is Pittsburgh International Airport.

Note: United includes Continental and Southwest includes Airtran for all years due to mergers between these airlines, which were fully effective for fiscal year 2014. American includes USAirways for all years due to merger effective for fiscal year 2015.

Airline Revenue Derived by Carrier

For the Year Ended December 30, 2020

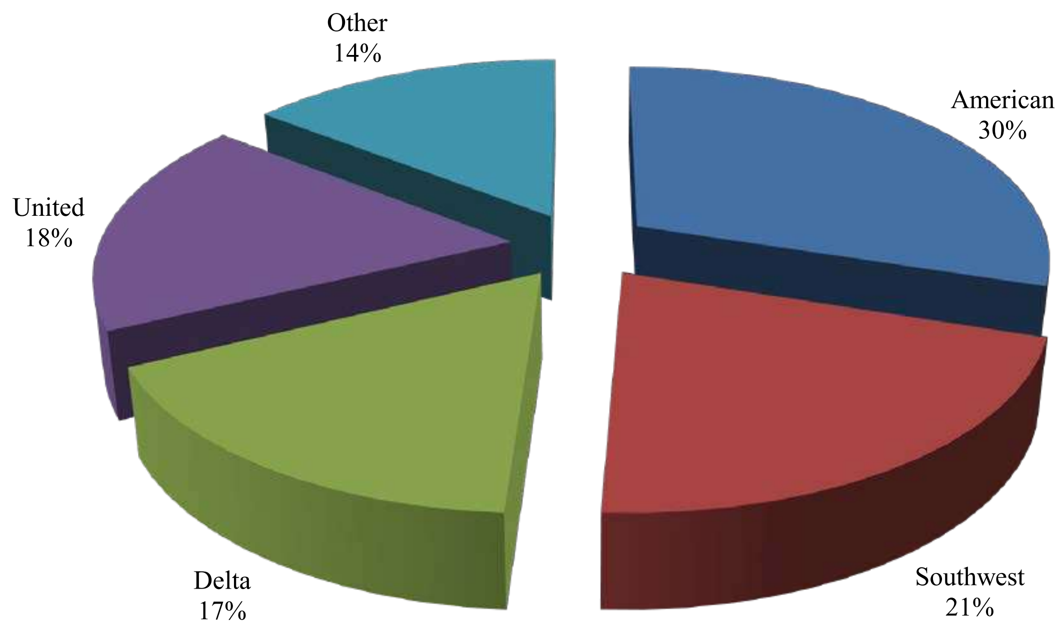


Table IV
Rates and Cost Per Enplaned Passenger
Last Ten Fiscal Years
December 30, 2020

	2020 Actual	2019 Actual	2018 Actual	2017 Actual	2016 Actual	2015 Actual	2014 Actual	2013 Actual	2012 Actual	2011 Actual
Landing fee rate	$ 3.0100	$ 2.6055	$ 2.3030	$ 2.3971	$ 2.4240	$ 2.2239	$ 2.6063	$ 2.9068	$ 3.1558	$ 3.3764
Terminal fee rate	161.67	179.61	145.67	139.90	133.42	132.61	136.04	140.32	130.05	133.68
Ramp fee rate	n/a	266.17	204.24	192.25	192.80	196.19	191.86	229.90	242.09	279.21
Operating expenses	98,523,291	107,045,661	109,461,863	99,934,480	96,447,247	93,079,111	90,560,685	87,806,989	85,322,555	83,706,181
Debt service	-	21,190,890	24,812,266	58,580,713	66,040,592	65,698,295	66,453,095	66,865,521	63,221,381	62,125,185
Nonrate base revenues	(51,083,457)	(87,317,539)	(87,182,388)	(83,539,654)	(86,202,047)	(84,416,245)	(94,214,399)	(78,223,979)	(87,823,923)	(85,735,770)
Debt service and operating expense offset	(12,934,912)	(5,545,000)	(9,200,000)	(27,402,477)	(32,964,368)	(31,864,241)	(16,653,372)	(27,903,808)	(12,250,000)	(6,400,000)
Airline capital fund deposits	4,758,828	13,799,380	13,038,513	10,529,788	11,009,655	10,591,738	10,433,599	9,933,170	9,932,664	9,836,475
Other, primarily cargo landing fees	(2,046,382)	(1,481,784)	(1,137,193)	(740,884)	(938,359)	(845,550)	(927,641)	(1,040,186)	(1,212,280)	(1,271,259)
Total rate base costs	37,217,368	47,691,608	49,793,061	57,361,966	53,392,720	52,243,108	55,651,967	57,437,707	57,190,397	62,260,812
Total enplaned passengers	1,815,361	4,881,951	4,834,085	4,495,180	4,151,628	4,053,880	4,000,461	3,943,152	4,015,229	4,160,024
Cost per enplaned passenger	$ 20.50	$ 9.77	$ 10.30	$ 12.76	$ 12.86	$ 12.89	$ 13.91	$ 14.57	$ 14.24	$ 14.97

Table V
History of Total Concessions Per Enplanement

Last Ten Fiscal Years
December 30, 2020

	2020 Actual	2019 Actual	2018 Actual	2017 Actual	2016 Actual	2015 Actual	2014 Actual	2013 Actual	2012 Actual	2011 Actual
Parking	$ 13,711,988	$ 41,631,005	$ 36,925,829	$ 33,895,240	$ 31,417,166	$ 30,554,032	$ 29,964,552	$ 28,319,696	$ 28,421,320	$ 27,093,789
Rent-A-Car	7,933,045	12,510,219	12,714,616	11,891,053	11,460,088	11,519,067	12,117,122	11,229,331	10,743,783	11,019,172
AirMall Concessions	5,804,834	7,925,137	8,901,724	5,957,342	5,926,912	5,553,241	5,372,968	5,194,833	4,829,979	5,199,124
Hotel/ConvCenter	534,024	616,152	576,308	549,420	541,551	516,217	546,935	569,682	580,804	544,038
Total passenger concessions	$ 27,983,891	$ 62,682,513	$ 59,118,477	$ 52,293,055	$ 49,345,717	$ 48,142,557	$ 48,001,577	$ 45,313,542	$ 44,575,886	$ 43,856,123
Total enplaned passengers	1,815,361	4,881,951	4,834,085	4,495,180	4,151,628	4,053,880	4,000,461	3,943,152	4,015,229	4,160,024
Concessions per enplaned passenger	$ 15.42	$ 12.84	$ 12.23	$ 11.63	$ 11.89	$ 11.88	$ 12.00	$ 11.49	$ 11.10	$ 10.54

Table VI
Outstanding Debt by Type and Revenue Bond Debt Service Ratios

Last Ten Fiscal Years
December 30, 2020

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Outstanding Debts										
Revenue bonds	$ -	$ -	$ 71,511,923	$ 88,589,194	$ 174,972,222	$ 229,952,019	$ 282,405,082	$ 333,672,158	$ 383,078,577	$ 360,304,163
Loans and other credit facility agreements	76,822,324	43,148,234	-	-	3,050,178	4,237,142	4,679,259	5,112,209	5,540,742	28,691,009
Obligations under capital lease			-	1,108,506	2,183,208	3,225,137	4,235,292	5,214,642	6,164,126	-
Total Outstanding Debt	$ 76,822,324	$ 43,148,234	$ 71,511,923	$ 89,697,700	$ 180,205,608	$ 237,414,298	$ 291,319,633	$ 343,999,009	$ 394,783,445	$ 388,995,172
Outstanding Debt Per Capita	Not Available	Not Available	$ 58.69	$ 73.34	$ 146.47	$ 192.95	$ 236.60	$ 279.33	$ 321.13	$ 316.92
Total Enplaned Passengers	1,822,219	4,894,337	4,834,085	4,495,180	4,151,628	4,053,880	4,000,461	3,943,152	4,015,229	4,160,024
Outstanding Debt/Enplaned Passenger	$ 42.16	$ 8.82	$ 14.79	$ 19.95	$ 43.41	$ 58.56	$ 72.82	$ 87.24	$ 98.32	$ 93.51
Outstanding Debt as % of Personal Income	Not Available	Not Available	0.09%	0.13%	0.27%	0.36%	0.44%	0.52%	0.62%	0.63%
Revenue Bond Debt Service										
Principal	$ -	$ 19,024,760	$ 16,860,000	$ 85,520,000	$ 53,990,000	$ 51,130,000	$ 49,535,000	$ 47,495,000	$ 43,355,000	$ 41,270,000
Interest	-	3,635,528	4,090,908	8,274,802	10,923,357	13,441,080	15,790,882	18,243,304	18,739,168	20,855,186
Total Revenue Bond Debt Service	$ -	$ 22,660,288	$ 20,950,908	$ 93,794,802	$ 64,913,357	$ 64,571,080	$ 65,325,882	$ 65,738,304	$ 62,094,168	$ 62,125,186
Total Expenses (Less Depreciation)	$ 120,407,156	$ 122,810,059	$ 122,810,059	$ 125,694,961	$ 109,830,260	$ 105,887,728	$ 96,794,290	$ 93,968,917	$ 90,915,759	$ 88,082,239
					0					
Revenue Bond Debt Service/ Total Expenses	0.00%	18.45%	17.06%	74.62%	59.10%	60.98%	67.49%	69.96%	68.30%	70.53%
Revenue Bond Debt Service/ Enplaned Passenger	$ -	$ 4.63	$ 4.33	$ 20.87	$ 15.64	$ 15.93	$ 16.33	$ 16.67	$ 15.46	$ 14.93

Table VII
Revenue Bond Debt Service Coverage

Last Ten Fiscal Years
December 30, 2020

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Pledged Revenues										
Landing fees	$ 11,842	$ 17,280	$ 14,854	$ 14,365	$ 13,471	$ 12,449	$ 14,362	$ 16,175	$ 17,176	$ 19,282
Terminal area airline fees	35,314	41,758	44,798	59,719	57,728	57,076	58,849	60,112	57,436	60,589
Other aeronautical revenue	8,798	8,297	8,770	7,818	7,691	7,808	7,736	7,499	7,452	7,249
Parking revenues	13,712	41,631	36,926	32,289	29,796	29,156	28,092	26,337	27,115	25,422
Rent-A-Car revenues	7,933	12,510	12,715	11,891	11,460	11,519	12,117	11,229	10,753	11,042
Terminal concessions	8,282	10,707	10,578	7,584	7,446	7,010	6,817	5,288	6,401	6,668
Other non-aeronautical revenue	21,748	12,821	22,519	34,433	44,742	43,235	38,564	37,029	31,282	24,535
AGC revenues	2,775									
Total pledged revenues	110,404	145,004	151,160	168,099	172,334	168,253	166,537	163,669	157,615	154,787
Operation and Maintenance Expenses										
Salaries, wages and related expenses	41,985	32,699	26,854	26,823	26,502	25,084	25,144	24,547	24,008	22,726
Cost allocations	-	44,664	51,471	43,540	40,697	38,713	35,827	34,891	33,856	31,737
Utilities	9,430	9,480	9,122	8,384	8,595	8,681	9,129	8,832	8,750	10,599
Cleaning and maintenance services	18,200	16,640	18,059	16,499	16,798	16,213	15,841	15,548	15,238	14,269
Professional services	24,719	187	340	553	236	285	256	261	173	178
Other	10,052	2,641	3,181	3,744	3,248	3,713	3,944	3,315	2,878	3,766
Total operation and maintenance expenses	104,386	106,311	109,027	99,543	96,076	92,689	90,141	87,394	84,903	83,275
Net Revenues	6,018	38,692	42,133	68,556	76,258	75,564	76,396	76,275	72,712	71,512
Plus: Other Available Funds	16,332	16,332	16,332	16,332	16,332	16,332	16,332	16,332	16,332	16,332
Total Net Revenues and Other Available Funds	$ 22,350	$ 55,024	$ 58,465	$ 84,888	$ 92,590	$ 91,896	$ 92,728	$ 92,607	$ 89,044	$ 87,844
Deposit Requirement Payments										
Deposits for debt service - Airport Revenue Bonds	$ -	$ 15,161	$ 16,686	$ 57,453	$ 64,914	$ 64,571	$ 65,326	$ 65,738	$ 62,094	$ 62,125
Funding deposit requirement	198	429	410	174	598	301	311	266	165	410
Total deposit requirement payments	$ 198	$ 15,590	$ 17,096	$ 57,627	$ 65,512	$ 64,872	$ 65,637	$ 66,004	$ 62,259	$ 62,535
Coverage Ratio	112.77	3.53	3.42	1.47	1.41	1.42	1.41	1.40	1.43	1.40

Table VIII
Enplaned Passengers by Airline Group

Last Ten Fiscal Years
December 30, 2020

Group	2020 Actual	2019 Actual	2018 Actual	2017 Actual	2016 Actual	2015 Actual	2014 Actual	2013 Actual	2012 Actual	2011 Actual
American	431,438	1,136,330	1,156,825	1,169,648	1,157,703	1,347,399	1,380,672	1,325,803	1,148,791	1,326,871
Southwest	478,707	1,231,855	1,257,464	1,211,828	1,134,880	1,025,342	1,062,692	1,073,403	1,021,737	1,093,219
Delta	279,350	921,353	848,698	768,660	750,335	753,924	741,023	704,436	742,383	726,664
United	243,810	763,085	713,564	650,645	624,348	628,187	650,568	688,264	913,844	763,812
Other signatories	358,437	626,942	692,307	508,889	304,687	156,338	112,301	113,635	150,214	152,814
Total signatory airlines	1,791,742	4,679,565	4,668,858	4,309,670	3,971,953	3,911,190	3,947,256	3,905,541	3,976,969	4,063,380
Scheduled nonsignatory	20,662	195,464	141,007	163,218	161,700	101,910	37,972	22,452	23,498	80,400
Nonscheduled	9,815	19,308	24,220	22,292	17,975	40,780	15,233	15,159	14,762	16,244
Total enplaned passengers	1,822,219	4,894,337	4,834,085	4,495,180	4,151,628	4,053,880	4,000,461	3,943,152	4,015,229	4,160,024

Note: United includes Continental and Southwest includes Airtran for all years due to mergers between these airlines, which were fully effective for fiscal year 2014. American includes US Airways for all years due to merger effective for fiscal year 2015.

Source: Monthly Analysis of Scheduled Airline Traffic Report

Table IX
Activity Statistics

Last Ten Fiscal Years
December 30, 2020

Fiscal Year	Total Passengers	<A> Aircraft Operations	Landed Weight (1,000 Lbs.)	Cargo Volume (1,000 Lbs.)
2020	3,649,270	91,803	3,703,501	157,603
2019	9,779,024	148,119	6,263,255	165,517
2018	9,658,897	151,414	6,196,005	156,219
2017	8,988,016	148,681	5,762,766	148,343
2016	8,309,754	141,630	5,387,059	150,239
2015	8,128,187	141,674	5,347,849	138,324
2014	7,998,970	135,293	5,233,428	135,840
2013	7,884,170	139,300	5,259,149	142,631
2012	8,041,357	139,217	5,091,746	146,653
2011	8,300,310	148,782	5,444,878	148,007

<A> An operation is any aircraft landing or takeoff.
Sources: Federal Aviation Administration Tower Reports and Airline Self Reporting

Table X
Count of Employees by Department

Last Ten Fiscal Years
December 30, 2020

Bus Unit	Description	Year End 2020	Year End 2019	Year End 2018	Year End 2017	Year End 2016	Year End 2015	Year End 2014	Year End 2013	Year End 2012	Year End 2011
1100	Administration	8	7	8	8	4	6	16	9	10	9
1200	Human Resources	8	8	8	10	9	10	6	4	4	4
1300	Finance	14	15	17	16	15	16	16	15	16	17
1400	Information Technology	14	13	12	7	4	5	5	5	3	3
1530	Engineering/Construction	9	8	12	7	7	7	8	8	8	8
1540	Planning	2	4	8	6	5	5	5	4	5	5
1700	Business Development	7	7	7	8	5	5	9	9	8	7
1850	Field Maintenance	84	107	110	114	116	114	118	113	117	119
1810	Facilities Maintenance	72	85	81	84	82	84	86	87	90	92
1860	Airfield Operatings	20	19	30	33	39	48	42	43	41	39
1870	Emergency Planning	7	8	11	12	10	10	10	12	13	11
	PSOM Admin	9	9								
1830	Fire Services	50	39	53	49	42	48	50	54	48	52
2300	Air Service Development	4	3	4	5	2	2	2	3	2	3
2400	Marketing & Communications	19	25	28	21	18	15	3	12	12	10
1820	Airline Services	52	58	61	63	67	66	65	68	73	73
1520	Facilities/Engineering/Maintenance	3	4	6	10	6	6	-	-	-	-
2410	Government and Community Affairs	3									
2440	Terminal Operations	-	-	-	7	5	-	-	-	-	-
1310	Legal	3	3								
1510	TMP	3	11								
9100	Allegheny County Airport	9	19	14	21	20	15	17	16	15	15
	Totals	400	452	470	481	456	462	458	462	465	467

Source: Allegheny County Airport Authority Human Resources Executive Summary of Employment Transactions

Pittsburgh International Airport (PIT) is located in Southwestern Pennsylvania approximately 15 miles west of downtown Pittsburgh. PIT occupies approximately 8,800 acres and is situated in Moon and Findlay Townships in Allegheny County. Access to PIT is provided via interstate 376. The volume, usage and nature of the Authority's most significant capital assets is discussed below.

Airfield

PIT has four runways, consisting of one crosswind runway (oriented northwest to southeast) and three parallel runways (oriented east to west) of which one is immediately north of the passenger terminal complex and the other two are south of the terminal:

Runway 28L/10R	11,500 feet long, 200 feet wide
Runway 28C/10C	9,700 feet long, 150 feet wide
Runway 28R/10L	10,500 feet long, 150 feet wide
Runway 14/32	8,100 feet long, 150 feet wide

The separation between the runways permits the capability of conducting dual landings and dual takeoffs in all weather conditions. All of PIT's runways can accommodate air carrier aircraft and are equipped with instrument landing systems, lighting systems and other air navigation aids, permitting PIT to operate in virtually all weather conditions. Precision instrument approach capability is provided to Runways 10R, 10L, 28R, 28L and 32. In addition, Runways 10R and 10L have the ability to handle Category II/III instrument landing systems (ILS).

Passenger Terminal

The Midfield Terminal opened on October 1, 1992 and consists of approximately 1.7 million square feet of enclosed space. The Midfield Terminal consists of a four-level landside terminal, a four-level airside terminal connected to the landside terminal by an automated underground people-mover system, and a two-level central services building and a commuter terminal. The landside terminal houses pre-security and ground transportation operations (passenger drop-off, ticketing/check-in, baggage claim and the security checkpoint). The existing landside terminal and people-mover system will be removed from service upon the completion of the TMP.

The "X-shaped" airside terminal has two major elements - a central "core" and four concourses. The Midfield Terminal with 75 gates was originally constructed to function as a major hub facility for the former US Airways to support a major connecting hub operation. As a result of de-hubbing in 2002, the number of gates in use was reduced, and the Authority removed gates from service in anticipation of constructing the TMP. New, common use technology and equipment also reduced the number of gates necessary for daily airline operations, so that 59 gates are currently available for use. The Midfield Terminal also originally included a commuter terminal. However, due to the reduction in connecting traffic and the discontinuation of service to many smaller communities, the commuter terminal was closed for operations and currently serves as an alternative security check point.

Arriving international passengers clear immigration and customs through a Federal Inspection Services ("FIS") facility comprising approximately 60,000 square feet, which can accommodate roughly 800 passengers per hour. The current FIS facility was designed primarily for connecting international passengers and is incorrectly configured for the needs of an O&D market.

Ground Access and Transportation

PIT can be accessed directly from the north or south via I-376 and Business I-376, which form a loop around the airport. The Midfield Terminal is served by a four lane, two-level roadway serving both sides of the landside terminal. One level serves the ticketing level and the other level serves the baggage claim level. Curb frontage on one side of the terminal is for private automobiles and curb frontage on the other side of the landside terminal is for commercial vehicles and ground transportation services.

The Airport's three-level parking garage contains approximately 2,100 public parking spaces, a rental car facility with 850 ready and return spaces, and 149 leased parking spaces for a total of approximately 3,099 parking spaces. The parking garage is connected to the landside terminal by an enclosed moving walkway and crosswalks that cross over the Airport's public arrivals roadways. Additionally, the Airport has 11,450 surface public parking spaces in its long-term and extended-term parking lots and 1,430 employee parking spaces in employee surface parking lots.

Rental car ready/return stalls are located on level 1 of the garage. Hertz operates a quick turnaround area adjacent to the garage at grade level for stacking, cleaning, fueling, washing and staging cars prior to moving them into the ready car spaces in the garage and the other companies perform these functions on leased space in the vicinity of the landside terminal as part of the service facilities. Currently, the following rental car companies operate on airport from the garage:

Hertz (Hertz, Dollar & Thrifty brand), Enterprise (Enterprise, Alamo-National brand), and Avis-Budget.

Hotel

A Hyatt Regency Hotel, which opened in June 2001, is located adjacent to the parking garage and adjacent to the landside terminal building and is accessible via the enclosed moving walkways. The facility contains 331 hotel rooms and approximately 21,000 square feet of convention space. The hotel provides a restaurant, bar/lounge, and an indoor pool/health club facility.

Airline Support

The Authority leases land and buildings to airlines and others for activities supporting airline operations. An aboveground aircraft fuel farm supplies fuel to the aircraft hydrant fueling system, which serves all 75 jet gates (of which 59 are currently in use), and a fueling rack at the commuter gates. An automotive fuel storage facility is located adjacent to the fuel farm.

American Airlines leases aircraft maintenance and parts facilities, which encompasses 473,529 square feet at PIT. American Airlines also leases a special services building at PIT.

LSG Sky Chefs leases a catering/food preparation facility containing 80,000 square feet that also serves as its North American frozen food kitchen and freezing facility.

In addition, the Authority constructed a wide-body deicing facility at PIT, which is being managed by a third-party company. That company also operates the Authority's main deicing pads, which are boom and truck operated, and utilize hot air technology.

Three cargo carriers, FedEx, UPS and Qatar Cargo, are signatories to the Airfield Use Agreement relating to the use and lease of the airfield for cargo operations (in December 2019, Qatar Cargo suspended cargo operations at the Airport on a temporary basis due to lower demand during the off-peak season, but resumed service in December 2020).

The Authority is engaged in strategic planning to further increase cargo operations at the Airport. In November 2019 the Airport was awarded an $18.7 million federal grant by the U.S. Department of Transportation ("USDOT") through the Better Utilizing Investments to Leverage Development program, to be used to build a 75,000 square foot cargo processing facility and an adjacent surface parking lot, which are expected to be constructed in 2021 and 2022, respectively. The new building will enable the Airport to serve larger planes and offer opportunities for airlines that require sorting facilities and access for high volumes of trucks.

Republic Airways operates aircraft maintenance facilities at PIT in three hangars containing 133,300 square feet. Atlantic Aviation operates a fixed base operation ("FBO"), containing a terminal building, two hangars, a fuel farm and an equipment maintenance building.

The Authority also owns and leases three corporate hangars that contain 114,000 square feet. MPAir leases 153,331 square feet of land from the Authority, which consists of a recently constructed hangar and flight facility. The Authority has leased to FJ Turbine its jet engine test cell facility consisting of 14,985 square feet and prep room consisting of 12,400 square feet.

Also located at PIT is a full-service fixed base operator (FBO) - Atlantic Aviation, which operates from the Business Aviation Center, and a limited FBO, Corporate Air, LLC, which operates from a corporate hangar facility.

Commercial/Industrial Property Development

There are approximately 3,600 acres of land at the Airport available to the Authority for non-aviation development of which approximately 52% are developable. In addition, approximately 5,000 acres of land at the Airport are designated as a "Foreign Trade Zone".

Significant development activities have been undertaken by the Authority in order to provide "pad ready" development sites, including the completion and continued development of infrastructure, including roadways and installation of utility services to develop further commercial office and industrial uses. Dick's Sporting Goods has located its corporate headquarters at the Airport; those facilities include one of the corporate hangars noted in the prior section. The Authority has entered into numerous ground leases with major development companies for over 3,000,000 square feet of office park, flex space, distribution facilities and other similar uses. The Authority is also developing the Pittsburgh Airport Innovation Campus to be a center for advanced manufacturing, particularly additive manufacturing and 3D-printing as mentioned in relation to the development of Neighborhood 91. Wabtec Corporation signed on as the first manufacturing anchor tenant at Neighborhood 91. Neighborhood 91, developed in conjunction with the University of Pittsburgh, is the first development of the 195-acre Pittsburgh Airport Innovation Campus. Wabtec will occupy more than 11,000 square feet of space at Neighborhood 91, which is currently under construction and targeting completion by Spring 2021. The company will be able to ship parts immediately from the airport to any location in the world within 24 hours, which will improve supply chain performance and cut transportation costs. Revenues from the various developers and land tenants are utilized by the Authority for further investment in development activities.

In addition, the County recently relocated its emergency response and 911 call center to the Airport on property leased from the Authority. The call center provides centralized 911 emergency call and response services to the entire County.

Other Facilities

Aircraft rescue and firefighting (ARFF) services are provided from one fire station. The Authority also operates an aircraft rescue and firefighting training center at PIT, which includes a fire-training simulator as well as classrooms, a management center, a vehicle bay, trainee/equipment support areas and a visitor center.

PIT also accommodates airfield maintenance buildings, an FAA Airport traffic control tower, air navigation aids and guidance systems, and various other support facilities. It also serves as the home of the Pittsburgh Air Reserve Station.

Sources: Planning & Business Development departments of Allegheny County Airport Authority

Table XI
Allegheny County - Demographic and Economic Statistics

For the Year Ended December 30, 2020

Year	Population	Personal Income (millions)	Per Capita Personal Income	Annual Average Unemployment Rate
2020	1,214,810	Not Available	Not Available	6.6%
2019	1,216,040	79,996	64,871	4.5%
2018	1,218,452	76,711	59,899	5.3%
2017	1,223,048	68,316	55,263	4.7%
2016	1,230,360	67,145	54,357	5.2%
2015	1,230,459	66,556	54,090	4.8%
2014	1,231,255	66,458	53,976	5.3%
2013	1,231,527	65,527	53,208	6.5%
2012	1,229,338	63,677	51,798	6.9%
2011	1,227,442	61,542	50,138	7.0%

n/a = information is not available
* Preliminary
Sources: Bureau of Economic Analysis U.S. Department of Commerce (www.bea.gov/regional)
Bureau of Labor Statistics U.S. Department of Labor (data.bls.gov)
Pennsylvania Department of Labor and Industry, Center for Workforce Information & Analysis

Table XII
Allegheny County - Principal Employers

For the Year Ended 2020 and 2011
December 30, 2020

2020 (1)

Employer	Employees	Percentage of Total County Employment
University of Pittsburgh Medical Center	53,000	8.39%
Highmark Health	23,846	3.78%
United States Government	18,109	2.87%
University of Pittsburgh	13,643	2.16%
PNC Financial Services	12,500	1.98%
Commonwealth of Pennsylvania	12,218	1.94%
Giant Eagle, Inc.	9,884	1.57%
Wal-Mart Stores, Inc.	9,000	1.43%
BNY Mellon	7,000	1.11%
County of Allegheny	6,237	0.99%
Total	165,437	26.22%
Total Employees in County	631,382 (3)	

2011 (2)

Employer	Employees	Percentage of Total County Employment
University of Pittsburgh Medical Center	38,700	12.57%
United States Government	18,570	6.03%
Commonwealth of Pennsylvania	13,610	4.42%
University of Pittsburgh	12,215	3.97%
West Penn Allegheny Health System	11,087	3.60%
Giant Eagle, Inc.	9,981	3.24%
Wal-Mart Stores, Inc.	7,550	2.45%
PNC Financial Services Group	7,032	2.28%
Westinghouse Electric	6,000	1.95%
Mellon Financial Corp.	5,266	1.71%
Allegheny County	-	0.00%
The Bank of New York Mellon		0.00%
Total	130,011	42.22%
Total Employees in County	307,764 (2)	

Sources:
(1) Allegheny County Accounting Department
(2) City of Pittsburgh Annual Comprehensive Financial Report 2011
(3) Pennsylvania Department of Labor and Industry; Center for Workforce Information & Analysis

APPENDIX B

REPORT OF THE AIRPORT CONSULTANT DATED JULY 30, 2021

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Appendix B

REPORT OF THE AIRPORT CONSULTANT

on the proposed issuance of

Allegheny County Airport Authority

AIRPORT REVENUE BONDS (PITTSBURGH INTERNATIONAL AIRPORT)
Series 2021A (AMT) and Series 2021B (Non-AMT)

Prepared for

Allegheny County Airport Authority

Prepared by

LeighFisher
San Francisco, California

July 30, 2021

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Leigh|Fisher

July 30, 2021

Ms. Christina Cassotis
Chief Executive Officer
Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal, 4th Floor Mezzanine
P.O. Box 12370
Pittsburgh, PA 15231-0370

Re: Report of the Airport Consultant, Allegheny County Airport Authority, Airport Revenue Bonds (Pittsburgh International Airport), Series 2021A (AMT) and Series 2021B (Non-AMT)

Dear Ms. Cassotis:

We are pleased to submit this Report of the Airport Consultant in connection with the proposed issuance of Airport Revenue Bonds, Series 2021A (AMT) and Series 2021B (Non-AMT) (collectively, the 2021 Bonds), by the Allegheny County Airport Authority (the Authority or ACAA) to fund a portion of the costs of the Terminal Modernization Program (TMP) and associated terminal improvements at Pittsburgh International Airport (the Airport or PIT). This letter and the accompanying attachment and exhibits constitute our report.

The 2021 Bonds are being issued pursuant to a Master Trust Indenture dated as of December 1, 2019 (the Master Indenture), as supplemented by a First Supplemental Indenture dated as of December 31, 2019, as amended (the First Supplemental Indenture), and the Second Supplemental Indenture to be dated as of August 1, 2021 (collectively the Indenture), each between the Authority and The Bank of New York Mellon Trust Company, N.A. (the Trustee). Bonds to be issued by the Authority under the Indenture are secured by a pledge of Net Revenues of the Airport System and moneys held in certain funds and accounts pursuant to the Indenture. Other Pledged Revenues (as defined below) are included in the calculation of Revenues. In addition, while not considered Other Pledged Revenues, PFCs Available for Debt Service may be used to reduce the Debt Service calculation for both the Rate Covenant and Additional Bonds Test. Pursuant to the First Supplemental Indenture, the Authority issued subordinated obligation notes (the Series 2019 Subordinate Notes) to PNC Bank, National Association (PNC Bank) to secure a revolving line of credit in the maximum principal amount of $150 million as of the date of this report. The PNC Line of Credit matures on December 22, 2022 unless otherwise extended pursuant to the terms of the loan agreement relating to the PNC Line of Credit.

Capitalized terms used in this report and not otherwise defined have the meanings given to such terms in the Indenture, the preliminary official statement related to the 2021 Bonds, or the Airline Operating Agreement and Terminal Building Lease.

The net proceeds of the 2021 Bonds, together with certain investment earnings thereon, will be used to (1) finance a portion of the costs of the TMP, Airside Renovation, and Airline Fit-outs (as described below), (2) make a deposit to the Common Debt Service Reserve Account in the Debt Service Reserve Fund to equal the Reserve Requirement, (3) fund capitalized interest on the 2021 Bonds, (4) repay all or a portion of the amount outstanding under the PNC Line of Credit (described above) which was used to pay certain costs of the TMP, and (5) pay the costs of issuance of the 2021 Bonds.

The report presents our projection of passengers enplaning at the Airport and evaluates the ability of the Authority to generate Net Revenues sufficient to satisfy the requirements of the Rate Covenant (defined below) for the projection period 2021 through 2028 taking into account the 2021 Bonds and the Future Bonds (as described below) estimated to be required to allow completion of the Authority's 2021 – 2030 Capital Improvement Program (the CIP or 2021 – 2030 CIP).*

The Authority

The Authority was created by the County of Allegheny (the County) on June 17, 1999 as a body corporate and politic under the Municipality Authorities Act of the Commonwealth of Pennsylvania (the Act). The Airport is owned by the County and is operated by the Authority under the Operation, Management, and Transfer Agreement and Lease (Transfer Agreement). The Authority's original Articles of Incorporation provided that the term of existence of the Authority extends to July 14, 2049; however, in June 2021, the County extended the term of the Authority through June 2059. In connection with the transfer, the Authority assumed the obligations of the County for airport revenue bonds previously issued by the County to finance construction and development of the Airport System, all of which were defeased in 2019.

Airport System

The Authority leases and operates two airports -- Pittsburgh International Airport, the air carrier airport serving the Pittsburgh metropolitan region, and Allegheny County Airport, which serves as the general aviation reliever airport to PIT (collectively, the Airport System as defined under the Indenture as the Airport System). PIT accounts for approximately 98% of total operating revenues for the Airport System.

PIT is classified by the FAA as a medium hub airport. The Airport ranked 48th among U.S. airports in terms of total enplaned passengers in 2020 and approximately 98% of its passengers were domestic origin-destination (O&D) passengers based on U.S. Department of Transportation (USDOT) data.

COVID-19 Implications for the Airport

Historical patterns of passenger and cargo traffic at PIT and other airports around the world were drastically disrupted by the coronavirus pandemic beginning in early 2020. Since then, work-at-home requirements, mandated closures of offices and businesses, and other restrictions imposed to contain the pandemic have caused serious economic contraction, unemployment, and financial hardship globally. This economic dislocation, combined with travel restrictions, public health concerns about the contagion, and social distancing requirements, have resulted in drastic and unprecedented reductions in airline travel and associated passenger-related revenues at PIT and nearly all other U.S. airports beginning in March 2020. The chart on the following page shows the magnitude of the decline in TSA passenger throughput as a surrogate for enplaned passengers in 2020 and 2021 relative to the same months in 2019 for PIT and the U.S. as a whole through July 25, 2021. Passengers have been steadily recovering at PIT similar to the trend for the U.S. as a whole. However, the more contagious Delta variant is causing increasing concern, and its impact on this uptrend, if any, is not known at this time. On July 22, the Centers for Disease Control and

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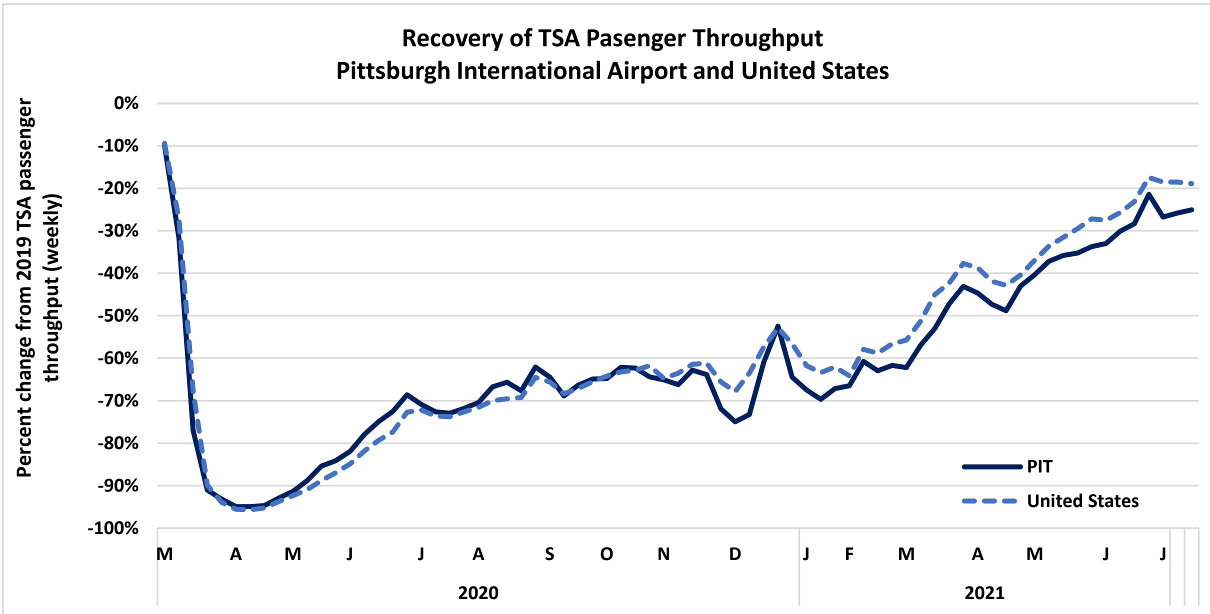
*The Authority's Fiscal Year ends December 31. Although not required for the 2021 Bonds, the projection period for the Additional Bonds Test in the Master Indenture is the later of (1) the fifth full Fiscal Year following the issuance of the proposed Bonds or (2) the third full Fiscal Year during which no interest on the proposed Bonds is expected to be paid from the proceeds. Interest on portions of the 2021 Bonds is expected to be capitalized through December 31, 2024. Therefore, to be consistent with the requirement to issue Additional Bonds under the Additional Bonds Test, and assuming DBO occurs in early 2025, the projection period for this report extends through 2028.

Prevention reported that this variant now accounts for over 80% of new cases in the U.S. Therefore, it is not known to what degree, if any, it will bring about further restrictions or economic dislocation.



Sources: https://www.tsa.gov/coronavirus/passenger-throughput; USDOT, Schedule T100, TSA Throughput, online database, accessed July 2021; and Allegheny County Airport Authority records through July 25, 2021.

Airlines serving PIT adjusted their networks to largely focus on leisure travel given the shift in the profile of air travelers based on the recovery of leisure travel in lieu of business travel, which is still lagging. More than a dozen destinations will be served by new routes in 2021 at PIT – some for the first time ever. In addition, a new low-cost startup - Breeze Airways - announced PIT as one of the first cities it will serve starting in July 2021 and new cargo service was initiated by Amazon in May of 2021.

In reaction to the pandemic, the U.S. Congress signed into law three separate acts that included measures to provide economic relief to U.S. airports – (1) the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) in March 2020, (2) the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSA) in December 2020, and (3) the American Rescue Plan Act (ARPA) in March 2021. In total, the Authority was awarded grants totaling $82.7 million for PIT and Allegheny County Airport (AGC) of which $5.1 million is for relief for concessionaires operating at the Airport. These grants may be used for reimbursement of operating expenses, debt service, and/or capital expenditures for each respective airport as allocated and must be used within four years. Federal grants provided under the CARES Act, CRRSA Act, and ARPA are collectively referred to in this report as Federal COVID-19 Grants. Under the Indenture, any Federal COVID-19 Grants are not included in Revenues; however, the Authority intends to designate certain of these grants used to reimburse O&M Expenses as Other Pledged Revenues (as described later). In addition, Allegheny County provided $2 million of its CARES allocation to the Authority to pay for a portion of police services in 2020. As described in the attachment, the Authority has developed a preliminary plan for utilizing these Federal COVID-19 Grants to pay O&M Expenses (tentatively for 2020 through 2024) as well as refund a portion of the outstanding principal and interest on the PNC Line of Credit.

During the pandemic, the Authority implemented a series of measures to control and reduce operating costs, defer capital costs, and increase terminal hygiene to instill customer confidence in traveling from the Airport, including:

1. Reducing O&M Expenses, including early retirement and voluntary furlough programs for Authority staff
2. Temporarily closing the extended term lot and suspending associated parking shuttles
3. Deferring and reducing non-critical capital expenditures
4. Implementing a PIT Safe Travels program to ensure the health, safety, and security for the traveling public, tenants, and staff
5. Implementing COVID-19 testing for staff and passengers
6. Increasing the cleaning of all touched public spaces, equipment, public restrooms, holdroom seating in terminals
7. Implementing touchless technology throughout the terminal complex
8. Requiring anyone entering an airport facility to wear a mask
9. Adding physical distancing reminder signs throughout all facilities
10. Formulating a preliminary plan to apply Federal COVID-19 Grants
11. Pausing construction of the TMP for one year while continuing to develop the design

Terminal Modernization Program, Airside Renovations, and Airline Fit-outs

After a multiyear planning process, the Authority Board approved a master plan for PIT in 2017 to guide future development at the Airport. The master plan identified the need to right-size and modernize terminal facilities that had been designed in the late 1980s in close cooperation with US Airways – the then dominant carrier at PIT – to accommodate its connecting hub operation, which was subsequently abandoned. The existing terminal complex was therefore designed with the intent to handle high volumes of connecting traffic when it opened in 1992, but today serves approximately 98% origin-destination (O&D) passengers and is now served by a diverse mix of airlines. As a result, existing terminal capacity in some respects far exceed the current level of activity, and in other respects, is undersized for a busy O&D airport.

The primary drivers for undertaking the TMP are (1) consolidating and expanding the passenger security checkpoint, (2) consolidating baggage handling facilities to improve the level of service and provide operating efficiencies, (3) reconfiguring the international arrivals facility that is no longer designed to meet current federal passenger processing requirements, (4) reducing the overall terminal footprint to achieve operating expense savings, (5) positioning the new landside terminal adjacent to the existing airside terminal to eliminate the need for an underground automated people mover system, (6) replacing 29-year old building systems such as elevators, escalators, mechanical, electrical, and communications technology that are reaching, or past the end of, their service lives, (7) aligning evolving customer demands using new technology, and (8) expanding congested terminal facilities in a cost-effective and operationally efficient manner. The right-sizing and balancing of all facility components is essential for future flexibility and environmental sustainability.

The TMP will replace the existing passenger landside terminal at PIT with a new landside terminal and associated facilities (roadways, parking, rental car facilities). It was developed on a collaborative basis and extensively coordinated with the airlines and their Airline Technical Representative (ATR) to serve the current profile of passenger demand and capacity requirements of PIT as well as improve building system functionality for an airside terminal with systems reaching the end of their useful life.

Initially, the Authority planned to start construction of the TMP in mid-2020, but due to the pandemic construction was put on hold while continuing to develop the design. During the year-long pause, the Authority instructed its designers to refine the TMP design and operational plans to include public health and safety features to address new concerns created by the pandemic. The expected date of beneficial occupancy (DBO) of the new landside terminal and associated facilities is late 2024 or early 2025. The financial projections discussed in this report assume a DBO of January 1, 2025.

Construction and operation of the new terminal and multi-modal complex has been designed to comply with the Leadership in Energy and Environmental Design (LEED) standards for building materials while also seeking to reduce use of energy and water, and waste, as well as to reduce emission of pollutants. The terminal is on track to attain LEED Silver certification, the customer service building LEED certification, and the garage "Park-Smart" certification. Certification is attained at design and construction points. Formal LEED certifications are expected approximately one year after the facilities are built and documentation is submitted.

The TMP is currently estimated to cost $1.35 billion based upon approximately 95% design, including construction, design, project and construction management, contingencies, an Owner Controlled Insurance Program, and estimated cost escalation. As of June 2021, the TMP budget contingency was $118 million, of which $96 million is Construction Contingency and $22 million is the Project Contingency. The Authority has received bids and awarded contracts for the acquisition of structural steel, foundation packages, and underground electrical and plumbing work for the TMP with construction starting in September. Construction bids for TMP components representing approximately 83% of total project costs are expected to be awarded by the end of 2021.

The new landside terminal will be located adjacent to, and be connected directly to, the existing airside terminal. The independent nature of the current landside and airside terminals will allow for construction of the new landside terminal and other components of the TMP while still maintaining existing operations. The Authority has received all requisite environmental approvals to construct the TMP.

While discussing the scope, design, and budget for the TMP, the Authority and the airlines decided to advance the construction of certain renovations to the existing airside terminal to allow these improvements to be performed concurrently with the construction of the new landside terminal complex while contractors are mobilized and thereby reduce construction costs. The estimated cost of such improvements totals $90 million, which is in addition to the $1.35 billion for the TMP, and includes holdroom (gate area) renovations; restroom remodeling; mechanical, electrical, and plumbing upgrades; flooring upgrades; jetway preconditioned air system replacements; conveyance upgrades; flight information display (FIDs) upgrades; lighting panel retrofits; furniture floor outlets; center core area transformation; skylight replacement; paging system upgrade; and sewage piping and interceptor replacements.

In addition to advancing certain airside renovations, at the request of the airlines, the Authority agreed to also finance the cost of certain airline tenant finishes and fit-outs for preferential leased premises in the new terminal to a move-in ready condition. The estimated cost of such improvements totals $14.9 million.

Once the new terminal is operational, the existing landside terminal will be decommissioned and alternative uses will be explored. If alternative uses are not realized, then the existing landside terminal will be demolished. The Authority intends to retain the existing garage for public or employee parking or for tenants of potential alternative uses of the landside terminal. The existing automated people mover system and automated baggage system will be removed from service and abandoned in place. The Authority also plans to demolish the ends of A and B Concourses on the airside after DBO in accordance with the agreed upon project scope with the Signatory Airlines.

2021 – 2030 Capital Improvement Program

The Authority maintains an ongoing major maintenance and capital improvement program for the Airport System that includes the TMP, airside renovations, and airline fit-outs. The 10-year 2021-2030 Capital Improvement Program (the CIP), which totals $2.1 billion (including the $1.35 billion budgeted for the TMP), is a multi-year plan of major capital projects linked to the Authority's strategic goals that provides a roadmap to implement projects, including targeted completion dates, budgets, and a preliminary funding plan. The projects are informed by the need to maintain existing infrastructure, potential government mandates, and the Authority's master plan (which addressed a 20-year planning period). The CIP was developed to address passenger safety, security, and passenger experience and is also designed to ensure the continued availability of existing facilities and to develop improvements necessary to meet the ongoing air travel demands of the region. Identification of major maintenance and facility rehabilitation projects in the CIP comes from periodic reviews of facilities, field reports, and a deferred maintenance schedule for key Airport System facilities.

In addition to the TMP, airside renovations, and airline fit-outs, four of the larger projects on the CIP are (1) development of a new cargo facility (Cargo 4), (2) infrastructure improvements for approximately 195-acre site known as Neighborhood 91 (N91)* to accommodate continued commercial development, (3) the potential closure of one of the parallel runways, and (4) the potential need to construct a deicing treatment facility. Cargo 4 is an approximately $63 million project to construct cargo warehouse and apron space to accommodate the expansion of cargo activity at the Airport. It is expected to be funded by a variety of State and Federal grants, including an $18.7 million BUILD grant from the U.S. DOT, and $25 million in Authority discretionary funds (as discussed below). Infrastructure development for N91 is expected to cost $44.6 million and be funded with a variety of State grants totaling $18.1 million, a $10 million Tax Increment Financing (TIF) loan, $6.5 million in Business in Our Sites (BIOS) loans, and the remaining $10 million with Authority Gaming Revenues.

The closure of one of the parallel runways was recommended in the 2017 PIT master plan because since the de-hubbing of the Airport in 2004 there is no longer a need for three parallel runways. The Authority is working with the FAA on a plan to decommission one of these runways. It is uncertain at this time if the FAA will approve of such a closure or the potential costs of doing so; however, preliminary estimates have been included in the 2021-2030 CIP for this project. If the runway is not closed, the cost to rehabilitate it would be slightly more than the estimated cost to close it. The expected O&M Expense savings from closing the runway were not reflected for purposes of this report.

The potential need to construct a deicing treatment facility has been on the Authority's future CIP for many years. As described in the preliminary official statement under the section titled "Environmental Matters,"

* Neighborhood 91 was named in recognition that Pittsburgh has 90 unique neighborhoods and this development is expected to make a significant contribution to the economic growth of the region.

the Authority has engaged in periodic negotiations with the Pennsylvania Department of Environmental Protection (DEP) regarding alleged violations to a January 1994 Consent Order and Adjudication relating to treatment of stormwater containing deicing chemicals (DIW) since 1998. Specifically, the Authority has proposed the construction of a stormwater deicing treatment facility to treat the stormwater containing deicing chemicals collected in the retention basins. The Authority continues to negotiate the resolution of the DIW issue with DEP and expects that it will need to take some action in the future to address the alleged violations. In the event the Authority needs to construct the treatment facility, the cost to construct it has been estimated by the Authority's consultant to range from approximately $46 million and $74.5 million depending on the effluent limits and other conditions in the final National Pollutant Discharge Elimination System (NPDES) permit renewal. Of this amount, the Authority expects 50% would be funded from State grants and the balance from its discretionary revenues and future Bonds. There would also be recurring costs for operations and maintenance of the collection and conveyance systems for the treatment facility ranging from $3.3 million to $4.9 million per year. Given the level of uncertainty about the project scope, need, and timing, the capital costs and associated operating expenses have not been incorporated in the financial projections described in the report. The earliest the Authority anticipates the treatment facility could be operational is 2027. If the treatment facility was required and constructed, the potential impact on the airline cost per enplanement would range from $0.92 to $1.44 per year in 2027 based on the above assumptions.

In addition to the TMP, airside renovations, and airline fit-outs projects described above, the CIP identifies another $586 million for projects to maintain and enhance PIT and $79 million for Allegheny County Airport for a total of an additional $665 million. The projects in the CIP, their estimated costs, and the funding plan are described in the attachment and summarized in Table 16 at the end of the report. Cost estimates were provided by the Authority and its consultants and include allowances for design, construction management, contingencies, and escalation. This includes annual funding for Equipment and Capital Outlays as defined in the Airline Operating Agreement and Terminal Building Lease (AOA), which are expected to average approximately $3.4 million per year between 2021 and 2030.

The table on the following page provides a summary of the 2021 – 2030 CIP and expected funding (in thousands).

Summary of the 2021-2030 Capital Improvement Program by Source (in 000s)
Allegheny County Airport Authority

	Terminal Modernization Program	Airside Renovations / Airline Fit-outs	Other CIP: PIT	Other CIP: Allegheny County Airport	Total
Grants	$ -	$ 14,600	$ 294,326	$ 67,831	$ 376,758
Bonds[1]	1,165,217	90,332	16,500	-	1,272,049
PFC Paygo	78,165	-	-	-	78,165
CFC Paygo	61,382	-	-	-	61,382
ACAA	-	-	149,001	11,077	160,077
Gaming/Gas	21,005	-	110,201	200	131,405
Debt Reimbursement[2]	20,570	-	-	-	20,570
BIOS/TIF	-	-	16,486	-	16,486
Total	$ 1,346,339	$ 104,932	$ 586,514	$ 79,108	$ 2,116,893

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1. The $16.5 million in Bonds shown above (other than TMP, airside renovations, and airlines fit-outs) would be for the deicing treatment facility, if needed, and are not included in the financial projections.
2. Amounts on the PNC LOC to be refunded from Federal COVID-19 Grants.

The costs of the CIP are expected to be funded by (1) FAA Airport Improvement Program (AIP) grants-in-aid, (2) Federal discretionary grants, including AIP discretionary and Better Utilizing Investments to Leverage Development (BUILD), (3) PennDOT Bureau of Aviation AIP matching grants, (4) other State grants, including Redevelopment Capital Assistance Program (RACP) grants, (5) $6.5 million from BIOS loans from the State, which have a pledge on revenues from the site to be improved in N91, which revenues are not part of Revenues under the Master Indenture, (6) $20.6 million from Federal COVID-19 Grants to refund principal and interest on the PNC Line of Credit, (7) funds generated through the residual ratemaking system for capital expenditures, (8) tax increment financing (TIF) loans, (9) other Authority discretionary funds, including Gaming Revenues and Natural Gas Revenues, and (10) Bonds for the TMP, airside renovations, and tenant fit-outs. All or a portion of PFC and CFC revenues are being dedicated to the TMP. Other than the BIOS loans from the State, the TIF loans for N91, and the potential need to construct a deicing treatment facility, at this time, the Authority does not plan to issue additional debt to fund projects in the CIP other than the TMP, Airside Renovations, and tenant fit-outs.

The current CIP represents to the Authority's best knowledge and belief at this time, all of the significant capital improvements expected to be undertaken through the projection period (2028) and beyond (through 2030). The Authority reassesses its capital needs at least annually and will modify the CIP as necessary to accommodate demand-driven traffic activity, security and health needs, strategic initiatives, receipt of required environmental and other regulatory approvals, and other factors which could result in increases or decreases to the CIP or extend or accelerate the timing to complete certain projects.

The Authority expects that the projects included in the 2021 - 2030 CIP, including the TMP, will provide the necessary Airport facility improvements to satisfy future airline and passenger needs through the projection period (2028).

Plan of Finance for the TMP and 2021 – 2030 CIP

The costs of the TMP, Airside Renovations, Airline Fit-outs, and other CIP projects are expected to be funded by proceeds of Bonds, federal grants-in-aid, State grants-in-aid, Federal COVID-19 Grants to refund principal and interest on the PNC Line of Credit, passenger facility charge (PFC) revenues, revenues derived from a customer facility charge (CFC) paid by Airport rental car customers, Gaming Revenues, Natural Gas Revenues, and internally generated Airport funds. The Authority applied for grants to help fund the Airside Renovations, including a 75% Voluntary Airport Low Emissions (VALE) program AIP grant with additional grant funding under the CARES Act and APRA Act laws. The Authority is also pursuing a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan from the USDOT to finance certain elements of the TMP. The availability of such a loan is unknown at this time, and no such loan is reflected in the financial projections contained in this report. However, if a TIFIA loan is obtained it is expected to have a positive impact on the economics of the TMP, and would be subordinate to the 2021 Bonds.

Exhibit A shows the estimated sources and uses of funds for the TMP, Airside Renovations, and Airline Fit-outs being funded in whole or in part from Bonds. The Authority's independent registered municipal advisor – PFM Financial Advisors LLC (the Municipal Advisor) - provided the estimated sources and uses of funds and estimated debt service requirements for the 2021 Bonds as well as Bonds expected to be issued in January 2023 (the 2023 Bonds) and January 2024 (the 2024 Bonds), collectively the Future Bonds, used to finance a portion of the TMP. A portion of the Bonds will be supported from PFCs and CFCs as described later.

Exhibit A also shows the associated sources of funding, including funding from the 2021 Bonds and the anticipated Future Bonds as described below. The specific assumptions for the issuance of the 2021 Bonds that are reflected in the financial projections contained in this report are as follows*:

2021 Bonds	Revenue-Supported	PFC-Supported	CFC-Supported
Issuance Date	8/26/2021	8/26/2021	8/26/2021
Bond-Funded Project Costs	$618,450,000	$177,500,000	$37,941,000
Assumed Interest Rate(s)	3.62% (TIC, 5% coupon premium scale)	3.62% (TIC, 5% coupon premium scale)	3.62% (TIC, 5% coupon premium scale)
Approx. Interest Rate Cushion Over Current Estimated Market Rates	+50 bps.	+50 bps.	+50 bps.
First Principal Payment	1/1/2026	1/1/2026	1/1/2026
Final Principal Payment	1/1/2056	1/1/2056	1/1/2056
Capitalized Interest	Through 1/1/2025 payment	Through 1/1/2025 payment	Through 1/1/2025 payment
Debt Service Structure	Approximately $40.9 million per year from 2026-2056	Approximately $11.7 million per year from 2026-2056	Approximately $2.5 million per year from 2026-2056

* Preliminary subject to change.

The specific form, amount, and timing of the Future Bonds required to complete the funding of the costs of the TMP, have not been determined at this time. Although the Authority will consider various financing options regarding the anticipated financings, for purposes of this report the Municipal Advisor assumed that similar to the 2021 Bonds, the Future Bonds will all be sold as senior lien fixed rate bonds with a cash-funded Common Debt Service Reserve Account. The current version of the plan of finance assumes that two series of Future Bonds will be sold on January 1, 2023 and January 1, 2024.

The detailed assumptions for the 2021 Bonds and the Future Bonds are presented in Exhibit A.

Estimated Debt Service requirements presented in Exhibit C for the proposed 2021 Bonds and Future Bonds were provided by the Municipal Advisor.

On December 18, 2019, the Authority defeased all of its long term debt issued under the 1999 trust indenture (the Prior Indenture) with cash on hand from a variety of sources, which allowed the Prior Indenture to be discharged. Under the new AOAs, the Authority will recover the cash it contributed to defease the outstanding revenue bonds (ACAA Loan) through amortization charges included in airline rates and charges from 2021 through 2026. Simultaneously, the Authority replaced its outstanding line of credit with PNC Bank with a new revolving line of credit that was issued as a Subordinate Obligation under the Indenture.

Master Trust Indenture

The 2021 Bonds will be the second series of Bonds issued by the Authority pursuant to the Master Trust Indenture and the first series of senior lien Bonds issued by the Authority under which The Bank of New York Mellon Trust Company, N.A, serves as Trustee. The first series of Bonds pertain to the subordinate lien PNC LOC. The Second Supplemental Indenture provides for certain amendments to the Master Indenture, which will become effective upon the issuance of the 2021 Bonds as described in the Preliminary Official Statement.

Revenues are generally defined as all income and revenues received by the Authority from the operation of the Airport System. Revenues do not include, among other things gifts or grants, PFC revenues, Customer Facility Charges (CFCs), Gaming Revenues, Natural Gas Revenues, and rents or other payments of any nature received now or in the future attributable to any ground leases, facility leases, or other developments which are identified as Neighborhood 91 (N91) unless as designated as Other Pledged Revenues.

PFCs Available for Debt Service are the amounts generated from PFC revenues that are designated by the Authority to be used to pay Debt Service accruing during an applicable period for Bonds issued to finance PFC-eligible project costs and may be used to reduce the Debt Service calculation in both the Rate Covenant and Additional Bonds Test.

Other Pledged Revenues are moneys that are designated by the Authority pursuant to Section 4.18 of the Master Indenture as Revenues and may include, but are not limited to, moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 of the Master Indenture, and a portion of gifts and grants (including Federal COVID-19 Grants), Customer Facility Charges, Gaming Revenues, and Natural Gas Revenues as declared by the Authority as Other Pledged Revenues. However, PFCs Available for Debt Service may not be designated as or considered Other Pledged Revenues. At this time, there is no rate stabilization funding provision in the new AOA; therefore, there is no expectation to make any deposits to this fund through the term of the AOA.

Operation and Maintenance Expenses (O&M Expenses) consist of the Authority's expenses for operation, maintenance, repairs, ordinary replacement, and ordinary reconstruction of the Airport System but do not include any capital cost or any allowance for depreciation or any operation or maintenance costs for Special Facilities.

In Section 5.04 of the Master Indenture (the Rate Covenant), the Authority covenants that it will fix, prescribe, and collect fees and other charges for the use of the Airport so as to produce:

1. Net Revenues (which include Other Pledged Revenues) equal to at least 100% of the amounts required to (a) pay Annual Debt Service on any Outstanding Bonds, (b) make the required deposits to the Common Debt Service Reserve Account or any Series Debt Service Reserve Account, (c) reimburse amounts owed to any Credit Provider or Liquidity Provider, (d) pay the interest on and principal of any indebtedness of the Authority during such Fiscal Year, other than for Outstanding Bonds, but including Subordinate Obligations, and (e) fund any debt service reserve funds created in connection with any indebtedness of the Authority other than Outstanding Bonds, but including Subordinate Obligations; and
2. Net Revenues and any amounts available in the Coverage Account,* in an amount at least equal to (a) 1.25 times the Annual Debt Service on Outstanding Bonds for each Fiscal Year and (b) 100% of the annual debt service with respect to all outstanding Subordinate Obligations.

For purposes of demonstrating compliance with the Rate Covenant and the Additional Bonds Test, Debt Service is reduced by the amount of principal and/or interest paid with Capitalized Interest, and PFCs Available for Debt Service, if any, as defined in the Master Indenture. CFC revenues equal to annual debt service due on CFC-supported Bonds will be designated as Other Pledged Revenues and deposited to the Revenue Fund. In addition, Federal COVID-19 Grants received by the Authority to reimburse O&M Expenses will be designated as Other Pledged Revenues.

Under Section 2.11 of the Master Indenture, certain conditions must be met before Additional Bonds may be issued to pay the Cost of Projects (the Additional Bonds Test). These conditions require, among other things, that estimates of Net Revenues together with funds available in the Coverage Account and any other legally available funds of the Authority plus Other Pledged Revenues shall equal at least 1.25 times Aggregate Annual Debt Service on (1) Outstanding Bonds, (2) the Additional Bonds, and (3) any future Series of Bonds which the Authority estimates will be required to complete payment of the estimated costs of construction of uncompleted portions of Airport Facilities, and (4) 100% of the annual debt service for each such Fiscal Year with respect to all outstanding Subordinate Obligations. The estimates of Net Revenues must satisfy these obligations for the later of (1) the fifth full Fiscal Year following the issuance of the proposed Bonds or (2) the third full Fiscal Year during which no interest on the proposed Bonds is expected to be paid from the proceeds. This provision of the Master Indenture is referred to as the Additional Bonds Test.

Subordinate Obligations

The Master Indenture permits the Authority to issue Subordinate Obligations secured by liens on the Authority's Revenues remaining after the deposits to the O&M Fund, Debt Service Funds, and Debt Service

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*The amount in the Coverage Account, which may be counted for purposes of the Rate Covenant or Additional Bonds Test, cannot exceed 25% of Annual Debt Service on the Outstanding Bonds in such Fiscal Year.

Reserve Fund that are subordinate to the liens provided to holders of the Authority's Bonds, including the 2021 Bonds.

As of July 1, 2021, the Authority has outstanding $86.7 million in the PNC Line of Credit. As noted earlier, PNC Bank provides a revolving line of credit to the Authority in the maximum principal amount of $150 million, which matures on December 22, 2022 unless otherwise extended pursuant to the terms of the loan agreement relating to the PNC Line of Credit. The PNC Line of Credit has been used to provide interim funding for costs of the TMP. The PNC Line of Credit is secured under the Master Indenture by a subordinate lien on Net Revenues. A portion of the proceeds of the 2021 Bonds will be applied to repay all or a portion of the outstanding balance of the PNC Line of Credit as of the date of issuance and delivery of the 2021 Bonds. Thereafter, the PNC Line of Credit will remain available to the Authority to finance costs of the TMP until it matures.

Other Debt

The Authority also has incurred $6 million in indebtedness that is not secured by the pledge of Net Revenues under the Master Indenture under a BIOS loan from the Commonwealth Finance Authority. The proceeds of the BIOS loan are being used for the development of infrastructure and related improvements for the N91. The BIOS loan has a pledge on revenues generated from certain real estate leases in N91, which are not part of Revenues under the Master Indenture. The Authority plans to request an additional $3 million BIOS loan for other infrastructure improvements in N91.

Airline Operating Agreement and Terminal Building Lease (AOA)

In late 2020, the Authority entered into a new Airline Operating Agreement and Terminal Building Lease (AOA) with passenger airlines relating to the use of the Airport, the rental of space, and the establishment of procedures for adjusting airline rentals, fees, and charges. The new AOA replaced an agreement that had been in place since 1988. Its effective date is January 1, 2020 and it was scheduled to expire on December 31, 2021, but was amended and extended through December 31, 2028, with an option to extend for an additional three years upon mutual agreement, through the end of 2031. The AOA provides Signatory Airline approval for up to $1.43 billion in TMP project costs (vs. the current budget of $1.35 billion) as well as $90 million for Airside Renovations. Amounts in excess of this would require Majority-In-Interest (MII) approval.* There are also project controls set forth in the AOA pertaining to the TMP as described under the TMP project governance section, later in the report.

As of the date of this report, the following airlines have signed the amended and extended AOA (the Signatory Airlines) – Alaska Airlines, American Airlines, Delta Air Lines, Southwest Airlines, Spirit Airlines, and United Airlines. These airlines and their affiliates accounted for 91% of the passenger market share at the Airport in 2020 and approximately 90% in 2019.

Each AOA is substantially identical except for provisions relating to the Leased Premises and assigned aircraft parking positions for each Signatory Airline. The Signatory Airlines collectively lease 22 of the 55 active gates with jetways on a preferential use basis. The remaining gates are available on a common use basis, of which six are Authority-controlled international gates. Similar to many “spoke” airports in a “hub and spoke” system, there are far more remain overnight (RON) aircraft parked than leased gates. For

*Majority-in-Interest means Signatory Airlines representing greater than 50% in number, plus one additional Signatory Airline, and carrying greater than 50% of the total Enplaned Passengers at the Airport.

example, in August 2019, prior to the pandemic, approximately 51 aircraft were parked at contact gates overnight during weekdays.

The AOA provides for the rental of space and the use of certain facilities by the Signatory Airlines, the establishment of cost accounting centers, and the periodic adjustment of the rentals, fees, and charges to be paid by the Signatory Airlines as determined by the costs and expenses associated with the cost centers as defined in the agreements. The AOA also (1) grants certain rights and privileges to airlines, (2) provides for the timing and manner of required payments of rates and charges, and (3) sets forth other applicable operating conditions and requirements at the Airport.

Under the AOA, Landing Fees and Terminal Rentals are each calculated according to "cost center residual cost" formulas, under which Non-Airline Revenues are credited against certain defined costs to determine the net cost to be paid by the Signatory Airlines in each cost center. The certain costs defined in the AOA include Operation and Maintenance Expenses (O&M Expenses), debt service, and other fund deposit requirements as required under the Indenture allocable to the respective Cost Centers, including the Coverage Requirement and O&M Reserve Requirement.

Signatory Airlines are also obligated to pay certain additional charges to recover costs associated with fit-outs to their ticket counters and aircraft parking (Ramp Fees). In addition, prior to DBO of the TMP, O&M Expenses, debt service, and certain rents related to the baggage systems are allocated amongst its users. Airlines also pay Facility Fees for the use of the common use gates, ticket counters, and associated facilities.

Under the new AOA, the number of cost centers used to derive airline rates and charges have been significantly streamlined into Airfield, Terminal, and ACAA cost centers for PIT, plus Allegheny County Airport (AGC). Airline-supported cost centers are the Airfield and Terminal. In addition to runway and taxiway areas, the new Airfield Cost Center includes the hangar & field support areas and military areas. The new Terminal Cost Center includes the passenger terminals, roadways, and all associated ground transportation facilities. The new ACAA Cost center encompasses all other areas at PIT. The first $600,000 per year (escalated with inflation) of surpluses or deficits from the AGC cost center will be credited to or included in the airline landing fee rate base. The remainder will be credited to or the responsibility of the Authority. AGC generated a surplus of $35,000 in 2018, broke even in 2019, and generated a surplus of $266,000 in 2020 in part due to an allocation of $158,000 in CARES grants.

Under the AOA, Signatory Airline rentals, fees, and charges are calculated to ensure that the Airport System generates sufficient Airport System Revenues in the airline-supported cost centers to operate on a break-even basis after paying all Costs of such cost centers (as defined below) plus produce annual discretionary funding for Airport System capital improvements or other lawful purposes from (1) a required deposit to the Airport System Capital Fund and (2) a Concession Incentive Fee equal to 6% of nonairline concession revenues. In addition, pre-DBO rates will fund the required increase in the amount to be on deposit in the Coverage Account prior to the opening of the TMP (the Coverage Requirement).

Certain aspects of the residual ratemaking methodology – will differ during the pre-DBO and post-DBO periods as follows:

1. The annual required deposit into the Airport System Capital Fund will equal $9.7 million per year commencing January 1, 2021, which will increase annually after 2021 by the greater of 3% or the change in the Consumer Price Index. This deposit requirement will be reset at $5 million per year in 2025, reflecting the opening of new facilities and the associated reduced repair and rehab of such

facilities, which will increase annually after 2025 by the greater of 3% or the change in the Consumer Price Index.

2. Funding the incremental amount of the Coverage Requirement from pre-DBO terminal rentals net of amounts currently on deposit that total approximately $16.3 million.

Costs are defined as (1) O&M Expenses, (2) the O&M Reserve Requirement (after giving effect to amounts on deposit in the Operation and Maintenance Reserve Account), (3) Aggregate Annual Debt Service (including the ACAA Loan), (4) Coverage Requirement* (if any, after giving effect to amounts on deposit in a Coverage Account), (5) expensed Equipment and Capital Outlays,** (6) Capital Projects to be expensed as provided in the agreement,*** (7) Fund Deposit Requirements,**** (8) the estimated amount of defending, settling, or satisfying any threatened litigation, litigation, assessment, judgment, settlement or charge net of estimated insurance proceeds to become payable to the Authority relating directly to the Airport System or its operation net of any revenues received by the Authority of any judgment or settlement arising as a result of the Authority's ownership, operation, and maintenance of the Airport System payable during said Fiscal Year, and (9) any and all other sums, amounts, charges or requirements of the Authority required to be recovered, charged, set aside, expensed or accounted for under the AOA or the Master Indenture.

Space is rented to the Signatory Airlines on an exclusive and preferential use basis subject to accommodation provisions, and for the post-DBO period the baggage handling facilities will be leased on a common use basis.

Prior to the start of each Fiscal Year, the Authority establishes rates to be in effect for the subsequent Fiscal Year. After the close of each Fiscal Year, there is an annual settlement, whereby the rates and charges are recalculated using audited financial statements to determine any airline under/over payment. If at any time during any Fiscal Year, the Authority's projections based upon its most recently available information with regard to Net Airfield Area Costs or Net Terminal Costs (as described above) actually incurred or realized during the Fiscal Year, together with the most recently available information with respect to landing fees or terminal rentals actually received by the Authority, indicate that such payments at the then-current rates would result in an overpayment or underpayment of five percent (5%) or more of the amount required to be generated by the Authority through such fees and charges during the Fiscal Year, then the Authority may adjust the respective rates for the remaining months of the Fiscal Year to conform to its current projection.

Cargo carriers can sign a separate airline operating agreement that provides similar rights and privileges, but the AOA establishes the signatory cargo landing fee rate to be equal to 110% of the Signatory Airline rate. Non-signatory passenger airlines pay a rate equal to 120% of the Signatory Rate.

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*The Coverage Requirement is the amount necessary to produce or maintain an amount in the Coverage Account pursuant to the Master Indenture.

**Equipment and Capital Outlays are individual equipment purchases and capital outlays to maintain or rehabilitate the Airport with an amount equal to the sum of: (i) $3,000,000 as such amount is increased by CPI for each subsequent Fiscal Year beginning in 2021; and (ii) an amount equal to the direct charges for such Fiscal Year for any capital outlay or equipment purchase for the Airport System approved by a MII.

***Capital Projects are any expenditure made to acquire, purchase or construct a single capital item or project for the purpose(s) of improving, developing, preserving, or enhancing the Airport and having a net cost to Authority in excess of $1,000,000 (as adjusted annually by the change in the CPI).

****Fund Deposit Requirements are amounts necessary to deposit to accounts established in the Master Indenture to satisfy all requirements set forth in the Master Indenture.

Revenues of the Authority Not Initially Pledged for Payment of Bonds

The Authority has identified additional revenue sources that it may choose to pledge to payment of debt service on the Bonds and/or O&M Expenses, including PFC revenues, CFC revenues, Federal COVID-19 Grants, Gaming Revenues, and Natural Gas Revenues. PFCs designated by the Authority as PFCs Available for Debt Service will be deposited to the Debt Service Fund for the purpose of paying principal and/or interest on Bonds. Federal COVID-19 Grants, Gaming Revenues, Natural Gas Revenues, and CFCs are excluded from the definition of Revenues in the Master Indenture except to the extent designated by the Authority in any Fiscal Year as Other Pledged Revenues and deposited to the Revenue Fund. Unless so designated and deposited, these amounts are not pledged to pay debt service on the Bonds.

The Authority intends to designate CFCs as Other Pledged Revenues to pay principal and interest on Bonds for rental car-allocable debt service, including a portion of the 2021 Bond debt service. Prior to DBO, CFCs will be applied to pay for rental car allocable TMP project costs on a pay-as-you-go basis. Per the CFC Rate Regulation, the CFC rate is $6.00 per transaction day. After DBO, any amounts in excess of allocable debt service will be retained in the CFC Fund as a debt service reserve and/or to pay rental car allocable costs and/or retire debt.

Other revenues not pledged for the payment of Bonds include revenues derived from N91 that are dedicated to the repayment of the BIOS loan as noted earlier.

PFC Program. The Authority has received approvals from the FAA under seven applications to collect and use PFCs for a total of $566 million in collection authority at the $4.50 level, including an approval in December 2019 of $62 million to pay for $28 million in PFC-eligible terminal and roadway design costs of the TMP and $34 million in associated financing costs. In the second half of 2021, the Authority intends to submit a new PFC application to collect and use PFCs for the eligible construction and financing costs of the TMP. It is estimated that approximately $537 million of the project costs for the TMP are PFC-eligible, which exceeds the Airport's PFC financing capacity. A PFC of $4.50 per passenger is projected to support $345 million in TMP project costs, consisting of $70 million in PFC pay-as-you-go (paygo) funding and $275 million in bond-funded project costs as projected in this report.

The Authority's current PFC collection authority extends to January 1, 2034. It is expected that when the new application for TMP construction is approved, the Authority's collection authority will extend through or beyond the term of the TMP bonds.

Existing and expected PFC approval is reflected in the financial projections presented in this report, including the authorization to use PFC revenues to pay a portion of the debt service attributable to the 2021 Bonds and Future Bonds as well as for pay-as-you-go PFC expenditures currently projected for the TMP under the planned subsequent PFC application described above.

Customer Facility Charges (CFCs). The Authority has levied a rental car CFC since March 1, 2011, which is assessed on all customers renting a vehicle from the Airport. The initial amount of $3.00 per rental car transaction day, not to exceed seven transaction days, was increased to $5.50 per day on November 1, 2018 and to $6.00 per day on February 1, 2020. In April 2020, the Authority raised the cap on the number of days of collection from 7 to 30 days at the request of the rental car companies. Through 2016, CFC revenues were used for operating expenses, debt service, and depreciation of facilities and assets utilized in rental car operations net of amounts already being collected from the rental car operators. Beginning in 2017, CFCs were set aside to pay for the rental car-related costs associated with the TMP. CFCs will be used to pay for rental car-related TMP project costs on both a paygo and leveraged basis with the first use of

CFCs to pay debt service on Bonds beginning at DBO. It is estimated that CFCs will fund approximately $61 million in paygo project costs and $54 million in Bond-funded project costs for a total of $115 million, including $54 million as part of the 2021 Bonds.

CFC Revenues are excluded from Revenues under the Master Indenture except to the extent designated as Other Pledged Revenues when deposited to the Revenue Fund under the terms of the Indenture.

The CFC amounts shown in the projection represent the Authority's expectations at this time but could be lower based on the actual CFC collections, capital improvement expenditures, and the financial results for the Fiscal Year.

Gaming Revenues. The Authority is a designated funding recipient under the Pennsylvania Race Horse Development and Gaming Act adopted by the State in 2000 and amended in 2017 (the Gaming Act). The Gaming Act legalized slot machine parlors and table games in race tracks and standalone facilities. During the past five years, the Authority has received a total of $53.2 million in revenues from the State under the Gaming Act (Gaming Revenues). The Gaming Act provides that the Gaming Revenues can be used for debt service, development, and economic development of the Airport.

The Authority expects to continue to receive payments of $12.4 million per year for so long as it continues to be a recipient under the Gaming Act. However, there can be no assurance that the Gaming Act will not be amended in the future to reduce or eliminate payments of such revenues to the Authority. The Authority intends to use Gaming Revenues as a paygo source of development costs and economic development, including making a contribution to the costs to fund the TMP and, following completion of the TMP, to pledge a portion of its Gaming Revenues to pay debt service on the Bonds as Other Pledged Revenues.

In the past, the Authority has deposited a portion of the annual Gaming Revenues in the Revenue Fund as a credit to fund debt service. The Authority currently expects to continue to do so in the future by designating a portion of annual Gaming Revenues as Other Pledged Revenues.

Natural Gas Revenues. On February 8, 2013, the Authority's Board awarded the bid to drill natural gas at the Airports to CNX Gas Company LLC (CNX). The Authority received an upfront payment of $46.1 million from CNX and will receive ongoing payments over the term of the lease which continues from year to year as drilling continues. In addition to ground rent, the authority earns ongoing royalties on the natural gas production. Net revenues from the natural gas lease have been used to reduce airline rates and charges and for capital expenditures, including economic development, at the Airport. During 2020 and 2019, drilling revenues of $5.6 million and $10.1 million, respectively, were received with $7.9 million allocated to fund various capital projects and $3.8 million allocated to reduce airline rates and charges.

Two pads and 14 wells have been completed at the Airport to date. While the Authority has received royalties on an ongoing basis under the Gas Lease, there can be no assurance that CNX will continue operations at the Airport, or that other companies active in the oil and gas business will be interested in obtaining rights at the Airport. Decisions regarding continued drilling, as well as the amount and frequency of royalties, are made based on market conditions relating to fluctuations in the price of oil, gas and other hydrocarbons on the open market and other various factors, and are not in the control of the Authority. Accordingly, there can be no assurance that the Authority will continue to receive royalties under the Gas Lease or that such royalties will remain at current annual levels.

In the past, the Authority has deposited a portion of the annual Natural Gas Revenues in the Revenue Fund as a credit to the airline rates and charges. The Authority currently expects to continue to do so in the future by designating a portion of annual Natural Gas Revenues as Other Pledged Revenues.

For purposes of this report, it was assumed that Gaming Revenues and Natural Gas Revenues designated by the Authority as Other Pledged Revenues starting at DBO would total approximately $11 million per year. The Authority reserves the right to adjust such amounts (other than its share of the baggage system costs which are equal to the 10% fixed portion) on an annual basis. Per the residual nature of the AOA, any reduction in the amount of Gaming Revenues and Natural Gas Revenues designated as Other Pledged Revenues would correspondingly increase Signatory Airline rentals, fees, and charges to ensure that the Airport System generates sufficient Airport System Revenues to operate on a break-even basis.

Scope of Report

The report was prepared to address the ability of the Authority to meet the requirements of the Additional Bond Test under the Master Indenture (even though that test is not yet in effect) for the projection period, 2020 through 2028, taking into account the proposed 2021 Bonds and the Future Bonds.

The report was prepared during the economic disruption, public health restrictions, and reductions in airline travel that resulted, beginning in early 2020, from the novel coronavirus (COVID-19) pandemic. The widespread availability of effective vaccines offers hope that the pandemic will soon be brought under control in the United States. However, uncertainties remain about the acceptance of vaccines; containment of the pandemic worldwide; quarantine and other travel restrictions; the pace of economic recovery and resumed growth; and future airline industry capacity. While airline travel is recovering, it is not known how much of pre-pandemic travel demand will be regained and how quickly the recovery will progress.

In light of these uncertainties, the report does not present forecasts of airline traffic at the Airports based on an analysis of the economic outlook for the region served, the outlook for airline service, and other key factors that will affect future traffic in the long term. Rather, it presents financial projections assuming "base case" and "downside" scenarios for the recovery of passenger traffic to 2019 levels of activity. The adopted range of projections is generally consistent with the range of estimates made recently by various airline industry and bond credit analysts.

In preparing the report, we analyzed:

- Future airline traffic demand at the Airport for the base and downside passenger traffic recovery scenarios.
- The status of, estimated costs, and proposed funding plan for the 2020 - 2030 CIP, including the TMP and the other capital improvements expected to be completed by 2028.
- Estimated sources and uses of funds and associated annual debt service requirements of the 2021 Bonds, and the Future Bonds expected to complete the financing of the projects comprising the – 2021-2030 CIP as provided by the Municipal Advisors. Interest accruing on the PNC Line of Credit for interim financing is not shown as a separate line item given the expectation that the Authority will refund all or a portion of such amounts with the proceeds of Bonds.
- Historical and projected future PFC revenues for pay-as-you-go expenditures and for the payment of debt service, including associated current and expected future designation by an Authorized Authority Representative of PFCs Available for Debt Service to the financing of PFC-eligible project costs.

- The Authority's intended use of PFC Revenues during the projection period, including the payment of debt service and pay-as-you-go project expenditures and the assumed approval of new for TMP terminal design and a subsequent PFC application for construction at the $4.50 level as described earlier.
- The Authority's intended declaration of CFC revenues to pay debt service CFC-supported Bonds as Other Pledged Revenues.
- The Authority's intended declaration of Federal COVID-19 Grants received to reimburse O&M Expenses as Other Pledged Revenues.
- Historical relationships among revenues, expenses, and airline traffic for the Airport and other factors that may affect future Revenues and O&M Expenses.
- The facilities expected to be provided, as included in the 2020-2030 CIP, and other operational considerations affecting Airport revenues and expenses, including estimates of future O&M Expenses as provided by the Authority.
- Audited financial results for the Airport for 2018, 2019, and 2020.
- The Authority's approved 2021 budget, including and associated airline rates and charges, and year to date revenue and expense trends for the first six months of the year.
- The ratemaking procedures under the new AOA for both the pre-DBO and post-DBO periods.
- The Authority's CFC Regulation and ground transportation policy and fee structure.
- The Pennsylvania Race Horse Development and Gaming Act as amended in 2019 under which $12.4 million per year is appropriated by statute to the Authority.
- Other contractual agreements relating to the use and lease of the Airport such as the operation of public automobile parking and other concession and service privileges (including rental car operations), and the leasing of buildings and grounds.
- The use of Federal COVID-19 Grants to refund $20.6 million in principal and interest on the PNC Line of Credit and the balance to pay operating expenses to offset the loss of revenues resulting from the pandemic.

We have relied upon the Authority and its construction managers for estimates of project costs and construction schedules for the TMP and other projects in the 2021-2030 CIP, and upon the Authority's Municipal Advisor for the plan of debt finance and estimated debt service requirements for the proposed 2021 Bonds and Future Bonds for financial modeling purposes.

We also identified key factors upon which the future financial results of the Airport may depend under the adopted range of passenger traffic recovery scenarios and, with Authority management, formulated assumptions about those factors. On the basis of those assumptions, we assembled the financial projections presented in the accompanying exhibits provided at the end of this report. Historical financial data and estimates of project costs, project financing, and annual debt service requirements were provided by the sources noted in the report.

Projected Airline Payments per Enplaned Passenger

Exhibits E-1 through E-3 present the projected financial requirements that determine terminal rentals, landing fees, and other fees and charges payable by the Signatory Airlines and Non-Signatory Airlines under the new AOA assuming the base passenger traffic recovery scenario. The exhibits also present projected airline payments expressed per enplaned passenger as summarized in the table below.

Projected Debt Service Coverage and Rate Covenant Compliance

The table below presents a summary of projected Net Revenues (including Other Pledged Revenues), the amount on deposit in the Coverage Account, Debt Service, Aggregate Annual Debt Service, Debt Service Coverage under Section 5.04 of the Indenture, total airline payments, enplaned passengers, and airline cost per enplaned passenger (CPE) under each of the base case and slower traffic recovery scenarios for 2021 through 2028 for information purposes. As shown, Net Revenues together with the amount on deposit in the Coverage Account, are projected to be at least 1.25 times the Aggregate Annual Debt Service on the 2021 Bonds, and the Future Bonds under both hypothetical traffic recovery scenarios. These projected results indicate compliance with the Rate Covenant under the Master Indenture during the projection period.

SUMMARY OF PROJECTED DEBT SERVICE COVERAGE AND AIRLINE PAYMENTS
Pittsburgh International Airport
(in thousands, except coverage)
(for the 12 months ending December 31)

		2021	2022	2023	2024	2025	2026	2027	2028
Base Traffic Recovery Case									
Net Revenues[1]	[A]	$ 29,745	$ 22,187	$ 24,683	$ 26,359	$ 76,132	$ 79,506	$ 80,038	$ 79,998
Coverage Amount	[B]	n.a.	n.a.	n.a.	n.a.	$ 16,149	$ 16,059	$ 15,965	$ 15,871
Total	[A+B=C]	$ 29,745	$ 22,187	$ 24,683	$ 26,359	$ 92,281	$ 95,566	$ 96,003	$ 95,869
Senior Bond Debt Service[2]	[D]	-	-	-	-	$ 84,542	$ 84,548	$ 84,545	$ 84,549
Less PFCs Available for Debt Service	[E]	-	-	-	-	(19,945)	(20,311)	(20,683)	(21,064)
Aggregate Annual Debt Service	[D+E=F]	-	-	-	-	$ 64,596	$ 64,237	$ 63,861	$ 63,485
Debt Service Coverage	[C/F]	n.a.	n.a.	n.a.	n.a.	1.43	1.49	1.50	1.51
Passenger Airline Payments	[G]	$ 39,182	$ 41,715	$ 45,555	$ 48,403	$ 65,718	$ 69,900	$ 70,970	$ 72,125
Enplaned Passengers	[H]	3,070	4,266	4,680	4,924	5,086	5,188	5,292	5,397
Cost Per Enplanement (CPE)	[H/G]	$12.76	$9.78	$9.73	$9.83	$12.92	$13.47	$13.41	$13.36
Slow Growth Traffic Recovery Case									
Net Revenues[1]	[A]	$ 29,591	$ 21,736	$ 24,236	$ 25,921	$ 79,786	$ 82,611	$ 83,254	$ 83,163
Coverage Amount	[B]	n.a.	n.a.	n.a.	n.a.	$ 16,332	$ 16,919	$ 16,856	$ 16,741
Total	[A+B=C]	$ 29,591	$ 21,736	$ 24,236	$ 25,921	$ 96,118	$ 99,531	$ 100,110	$ 99,904
Senior Bond Debt Service[2]	[D]	-	-	-	-	$ 85,954	$ 85,954	$ 85,954	$ 85,954
Less PFCs Available for Debt Service	[E]	-	-	-	-	(18,028)	(18,277)	(18,530)	(18,990)
Aggregate Annual Debt Service	[D+E=F]	-	-	-	-	$ 67,927	$ 67,677	$ 67,424	$ 66,965
Debt Service Coverage	[C/F]	n.a.	n.a.	n.a.	n.a.	1.42	1.47	1.48	1.49
Passenger Airline Payments	[G]	$ 41,411	$ 48,421	$ 52,210	$ 54,933	$ 74,412	$ 78,191	$ 79,536	$ 80,155
Enplaned Passengers	[H]	2,849	3,689	4,112	4,369	4,631	4,701	4,771	4,899
Cost Per Enplanement (CPE)	[H/G]	$14.53	$13.12	$12.70	$12.57	$16.07	$16.63	$16.67	$16.36

1. Includes Other Pledged Revenues.
2. Excludes interest expense on the revolving PNC Line of Credit, which is expected to be capitalized.

Note: DBO for the TMP projected to be late 2024 or early 2025; therefore, debt service is capitalized through January 1, 2025.
Sources: Debt service: PFM. All other LeighFisher.

Assumptions Underlying the Financial Projections

The projections in this report are based on information and assumptions that were provided by or reviewed with and agreed to by Authority management. The projections reflect Authority management's expected course of action during the projection period through 2028 and, in Authority management's judgment, present fairly the expected financial results of the Airport associated with the respective hypothetical levels of aviation activity during the projection period. Those key factors and assumptions that are significant to the projections are set forth in the attachment, "Background, Assumptions, and Rationale for the Financial Projections." The attachment should be read in its entirety for an understanding of the projections and the underlying assumptions.

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

* * * * *

We appreciate the opportunity to serve as the Authority's Airport Consultant in connection with this proposed financing.

Respectfully submitted,

LeighFisher

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Attachment

BACKGROUND, ASSUMPTIONS, AND RATIONALE
FOR THE FINANCIAL PROJECTIONS

Allegheny County Airport Authority

Pittsburgh International Airport

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AIRLINE TRAFFIC ANALYSIS

This section provides a summary of existing Airport System facilities, a description of the region served by Pittsburgh International Airport (the Airport or PIT), a description of the role of the Airport, the economic basis for airline traffic at the Airport, key factors affecting future airline traffic, and projections of enplaned passengers and aircraft landed weight. To build a foundation for this airline traffic discussion, the facilities and services provided by the Authority are presented first.

AIRPORT FACILITIES

Pittsburgh International Airport is located in Southwestern Pennsylvania approximately 15 miles west of downtown Pittsburgh. The Airport occupies approximately 8,800 acres and is situated in Moon and Findlay Townships in Allegheny County. Access to the Airport is provided via Interstate 376.

Figure 1 presents an aerial of the Airport existing facilities.

Airfield

The Airport has four runways, consisting of one crosswind runway (oriented northwest to southeast) and three parallel runways (oriented east to west) of which one is immediately north of the passenger terminal complex and the other two are south of the terminal:

Runway 28L/10R	11,500 feet long, 200 feet wide
Runway 28C/10C	10,775 feet long, 150 feet wide
Runway 28R/10L	10,502 feet long, 150 feet wide
Runway 14/32	8,101 feet long, 150 feet wide

The separation between Runways 28L/10R and 28R/10L permits the capability of conducting dual landings and dual takeoffs in all weather conditions. All of the Airport's runways are designed to accommodate air carrier aircraft and are equipped with instrument landing approaches, lighting systems, and other air navigation aids, permitting the Airport to operate in virtually all weather conditions. Precision instrument approach capability is provided to Runways 10R, 10L, 28R, 28L, and 32. In addition, Runways 10R and 10L have the ability to handle Category II/III instrument landing systems (ILS) and Runway 28R has the ability for a Special Authorization CAT II (SA CAT II). An Airfield Modernization Study being conducted in partnership with the FAA is currently underway. The study examines the feasibility of closing one runway due to overcapacity to achieve more efficient airfield operations and reduce capital and operating expenses.

Passenger Terminal

The Midfield Terminal opened on October 1, 1992 and consists of approximately 1.7 million square feet of enclosed space. The Midfield Terminal consists of a four-level, double-sided landside terminal, a four-level airside terminal (with tower in the center core on the fifth through seventh levels) connected to the landside terminal by an automated underground people-mover system, and a two-level central services building.

The landside terminal provides for the ticketing of passengers, collecting and sorting baggage, baggage claim and security screening of passengers. The "X-shaped" airside terminal has two major elements – a central "core" and four concourses. An automated baggage system conveys inbound and outbound baggage between the landside terminal and the airside terminal for American Airlines and Southwest Airlines on the north side of the terminal.

Figure 1
EXISTING PITTSBURGH INTERNATIONAL AIRPORT FACILITIES

Source: Allegheny County Airport Authority.

The central services building contains the automated people mover (APM) station for the landside terminal, general offices, support equipment functions, the north area baggage screening facility, and an alternative passenger security screening checkpoint that is opened when the main checkpoint in the landside terminal becomes congested, as well as enclosed walkways that had served commuter aircraft operations, but are now used as covered walkways to employee parking on the former commuter aircraft ramp. In late July 2021, the employee parking will be relocated to the long-term lot to make room for construction staging for the new terminal.

There are currently 52 gates of which 5 are equipped to accommodate arriving international passengers. All gates are equipped with loading bridges, aircraft support systems, and hydrant fueling. As a result of US Airways' de-hubbing of the Airport (described later), in January 2008 the Authority decommissioned portions of the A and B Concourses as a cost savings measure. In addition, several gates on Concourses C and D were removed from the building to make room for the TMP. Also due to the reduction in connecting traffic and the discontinuation of service to many of the smaller communities, the commuter terminal was closed for operations and currently serves as an alternative security checkpoint. In 2011, the Authority removed the commuter aircraft apron from the air operations area and relocated airport employee parking to this area. This area has now been converted into a construction staging zone for the TMP.

Arriving international passengers clear immigration and customs through a Federal Inspection Services (FIS) facility located on the lower level of Concourse C that comprises approximately 60,000 square feet, which can accommodate 800 passengers per hour. The current FIS facility was designed primarily for connecting international passengers and is not effectively configured for the needs of an origin-and-destination market. The TMP will address this deficiency and renovate the facility for the Customs and Border Patrol Airport Technical Design Standards that were updated in 2017 for all new and renovated FIS facilities. Under the new standard passengers must collect their bags first before checking in with a customs officer. This design also supports Custom and Border Patrol's ("CBP") current inspection requirements and is adaptable to future workloads, technologies, and operational needs.

Ground Access and Transportation

The Airport property can be accessed directly from the north or south via I-376 and Business I-376, which form a loop around the Airport. The existing Landside Terminal is served by a four lane, two-level roadway serving both sides of the landside terminal. One level serves the ticketing level and the other level serves the baggage claim level. Curb frontage on one side of the landside terminal is for private automobiles and curb frontage on the other side of the landside terminal is for commercial vehicles and ground transportation services.

A three-level parking garage adjacent to the landside terminal contains 2,100 public parking spaces, a rental car facility with 850 ready and return spaces, and 149 leased parking spaces for a total of 3,099 parking spaces and is connected to the landside terminal by an enclosed walkway that crosses over the public arrivals roadway.

In addition, 12,344 spaces are provided for public and employee parking in long-term, walkable economy, and extended-term surface parking lots, which are all within walking distance of the terminal. Moving walkways link the long-term surface parking lot to the landside terminal with a maximum walking distance of 800 feet to the moving walkways. Parking patrons using the long-term and extended term lots can also use the Authority's shuttle bus service.

As a result of the sharp contraction in passengers from the pandemic, the Authority closed the extended term lot, reduced the number of spaces in the long-term lot, suspended the shuttle bus service, and reduced the parking rates for the garage and long-term lot in late March 2020. On April 12, 2021, the extended term lot was reopened, shuttle bus service was re-instated, and the rates for the garage and long-term lot reverted to the pre-pandemic levels. In addition, in April 2021, 2,500 spaces from the extended term lot were converted to long-term lot spaces to accommodate employee parking spaces that were displaced for TMP construction staging on the former Concourse E apron.

Rental car ready/return stalls are located on level 1 of the garage. Hertz operates a quick turnaround area adjacent to the garage at grade level for stacking, cleaning, fueling, washing, and staging cars prior to moving them into the ready car spaces in the garage and the other companies perform these functions on leased space in the vicinity of the landside terminal as part of their service facilities. Currently, three companies representing seven brands of rental car companies operate on-Airport from the garage: (1) : (1) Avis Budget Group (Avis and Budget brands) (2) Enterprise Holdings (Enterprise, Alamo, and National brands), and (3) The Hertz Corporation (Hertz and Dollar brands). Both Thrifty and Payless exited the market in 2020. Payless declared bankruptcy and ceased operations. Thrifty decided not to renew its contract.

Hotel

A Hyatt Regency Hotel, which opened in June 2001, is located adjacent to the parking garage and adjacent to the existing landside terminal building. The facility contains 338 hotel rooms and approximately 20,000 square feet of convention space. The hotel provides a restaurant, bar/lounge, and an indoor pool/health club facility. The Hyatt remained open throughout the pandemic although they accommodated far less customers than prior.

Other Aviation Facilities

The Authority leases land and buildings to airlines and others for activities supporting airline operations. The Authority leases an above-ground aircraft fuel farm to an airline consortium that accommodates 8.4 million gallons of Jet A fuel and supplies fuel to the aircraft hydrant fueling system serving all jet gates. In addition, Atlantic Aviation has storage for 40,000 gallons of Jet A and 20,000 gallons of aviation gasoline (Avgas). An automotive fuel storage facility is located adjacent to the fuel farm.

American Airlines leases aircraft maintenance and parts facilities which encompasses 488,529 square feet. Republic Airways operates aircraft maintenance facilities on the Airport in two hangers containing 99,605 square feet.

LSG Sky Chefs leases a catering/food preparation facility containing 80,000 square feet that provides in-flight catering services to all air carriers at the Airport.

In addition, the Authority constructed three deicing pads at the Airport which are managed by a third-party company. The fixed base operation (FBO) also provides deicing services to airlines.

Air cargo transported by the passenger and all-cargo airlines is processed through four facilities consisting of (1) three multitenant cargo buildings with airside ramp access, including one building with UPS and (2) one FedEx cargo sortation facility and building. The four facilities comprise approximately 231,598 square feet in warehouse space and 736,000 square feet in cargo aircraft apron area. All four cargo buildings are managed by Aviation Facilities Company, Inc. (AFCO). In May 2021, Amazon Air initiated service to PIT and is leasing 50,000 square feet from AFCO.

The Authority is in the process of constructing a new nearly 80,000 square-foot facility (called Cargo 4) with warehouse, office space, 18 loading docks, and an ability to handle freight from all aircraft types on a 24 acre site, which will significantly expand air cargo facilities at the Airport. The Cargo 4 apron will be able to serve two Boeing 747-8 Freighters side by side, or up to four Boeing 757-200s at once. Cargo 4 is scheduled to open in 2024. Current freight capacity at the three existing cargo facilities—Cargo 1, 2, 3 and Cargo A—is expected to exceed capacity in the near future. In addition to providing much-needed space for future expansion, Cargo 4 will also bring new technology and handling capabilities to PIT. The new building will allow for larger aircraft or new destinations for integrator carriers such as FedEx or UPS that require sorting facilities and high volumes and access for trucks.

Several companies that maintain their world or regional headquarters in the Pittsburgh area own or lease facilities at the Airport and conduct general aviation aircraft operations, including Dick's Sporting Goods, BNY Mellon (who subleases to LJ Aviation), and U.S. Steel. Effective January 1, 2022, LJ Aviation is expected to lease the hangar directly from the Authority instead of as a subtenant to BNY Mellon. The Authority leased its jet engine test cell facility consisting of 14,985 square feet and prep room consisting of 12,400 square feet to FJ Turbine Power, Inc.

Atlantic Aviation operates the Airport's only full-service FBO containing a terminal building, two hangars, a fuel farm, and an equipment maintenance building. Atlantic Aviation operates from the Business Aviation Center. In addition, a limited FBO, Corporate Air, LLC, operates from a corporate hangar facility.

The Authority developed a first-of-its-kind 20 megawatt energy plant and 3 megawatt solar facility microgrid that was built, financed, operated, and maintained by Peoples Natural Gas and will support normal operations for the airfield, terminals, the Hyatt Hotel, and the gas station/convenience store. The microgrid is able to operate independently from the grid, but the Authority will maintain an interconnect with Duquesne Light for emergency or back-up power. The microgrid is fueled in part by the natural gas wells sourced from wells drilled on Airport property and serve five natural gas generators, as well as approximately 9,400 solar panels across eight acres. The Airport's current peak demand is approximately 14 megawatts; therefore, the microgrid can supply 100% plus of the Airport's electricity demand. Peoples Natural Gas is permitted to export excess capacity to the grid and retain the revenues. The microgrid is expected to provide savings in energy expenses to the Authority as well as bring power resiliency and redundancy to enhance safety and ensure continued operations. It became fully operational in July 2021.

Commercial/Industrial Property Development

There are approximately 3,717 buildable acres of land at the Airport available to the Authority for non-aeronautical use of which 70 acres are occupied by community parks in Findlay and Moon Townships, 230 acres occupied by gas drilling operations, and 1,200 acres occupied by commercial real estate development. Approximately 2,217 acres remain available for future development. The Airport is included in Foreign Trade Zone 33 operated and controlled by the Regional Industrial Development Corporation of Southwest Pennsylvania, a privately funded non-profit entity focused on managing and developing research and business parks.

The Authority has been actively engaged in the development of its property to stimulate the economies of the region as well as stimulating activity in the airport corridor. The Authority has constructed infrastructure and installed utility services to these areas to provide "pad ready" development sites. Revenues from the various developers and land tenants are used by the Authority for further investment in development activities. To date, 26 buildings have been constructed totaling nearly 4 million square feet of commercial development with more than $400 million in private investment. This development has created or retained an estimate 6,500 jobs and generated $3.14 million in gross revenue in 2020 (excluding the 911 Call Center).

As shown on Figure 2, several active commercial/industrial developments exist at the Airport, including:

- The Airside Business Park is located on the site of the former airport terminal. Currently, there are six buildings totaling approximately 462,000 square feet which are substantially occupied. Tenants include Michael Baker International, Mckesson, Mortgage Connect, A. Stucki, and Rockwell Automation.
- Clinton Commerce Park is a 790-acre bulk warehouse park on the northwest side of the Airport. To date, eight buildings have been constructed totaling nearly 1.5 million square feet and a ninth 460,000 square foot building is under construction. Tenants include Pittsburgh Post-Gazette, Knepper Press, FedEx Smart Post, Berlin Packing, Nord-lock, Graybar, Haemonetics, American Tire, and Shell Appalachian.
- Cherrington Commerce Park is a 160-acre business park located on the east side of the Airport where site work was completed in 2008. Five buildings totaling more than 250,000 square feet have been constructed on the site. Tenants include Service Link, Mastech Digital, and Harbison Walker International.
- Dick's Sporting Goods relocated its world corporate headquarters on Airport property in 2009. The company currently leases 116 acres of airport property in the Northfield site and has constructed a 661,000 square foot office complex and a 60,000 square foot corporate hangar. The company took occupancy of the facilities in February 2010.
- Industry Drive is a 110 acre site that has additional capacity for a 50,000 square foot building. Tenants include Allstate, Jacobs, Thermo Fisher, Under Armour, and PerkinElmer.
- McClaren Business Park has 30 buildable acres with 400,000 square feet of light industrial development planned. Land improvements are expected to be complete in mid-2021.
- The Northfield Business Park is a 90-acre site with development capacity up to 750,000 square feet.
- Neighborhood 91 (N91) is a 195-acre planned development. It has a World Trade Center designation as well as tax and import/export benefits. This site will be a center for advanced manufacturing and an international epicenter for companies in the 3D printing supply chain or additive manufacturing space (as described in the next section). On June 8, 2021, Wabtec opened its 11,000 square foot lab at the N91 site that features an SLM®800 printer, which will produce state-of-the-art, large-scale, lightweight parts for rail industry customers. This is one of two new developments that broke ground in 2020 which provide approximately one million square feet among nine new buildings.
- The Pittsburgh International Commerce Park is a 1,300-acre site zoned for heavy industrial use of which 7 acres is "pad-ready." The topography and natural resources make development challenging and costly for this site.

Figure 2
COMMERCIAL/INDUSTRIAL DEVELOPMENT PROJECTS
Pittsburgh International Airport

Source: Allegheny County Airport Authority.

Sunoco, Inc. opened an automobile gas station and convenience store on 2.5 acres located at the northwestern corner of the Airport parking lots. The operation provides 24-hour self-fueling.

In total, the Authority has entered into numerous ground leases with major development companies for over 3 million square feet of office park, flex space, distribution facilities and other similar uses.

Other Facilities

Aircraft rescue and firefighting (ARFF) services are provided from one fire station at PIT and one at AGC. The Authority also operates an aircraft rescue and firefighting training center at the Airport, which includes a fire training simulator as well as classrooms, a management center, a vehicle bay, trainee/equipment support areas and a visitor center.

Also located at the Airport are units of the U.S. Air Force (911th Airlift Wing) and Pennsylvania Air National Guard (171st Air Refueling Wing), which provide aerial refueling, air mobility, and tactical airlift support to the U.S. Air Force and other U.S. Department of Defense activities. In March 2012, the Air Force said it plans to close the 911th Airlift Wing as part of a realignment to eliminate unneeded aircraft, which includes all the C-130s assigned to the Air Force Reserve base at the Airport. The Air Force also said it planned to reduce the number of aircraft at the adjacent Pennsylvania Air National Guard's 171st Air Refueling Wing.

The Airport also accommodates airfield maintenance buildings, an FAA Airport traffic control tower, air navigation aids and guidance systems, and various other support facilities. It also serves as the home of Pittsburgh Air Reserve Station.

In addition, Allegheny County recently relocated its emergency response and 911 call center to the Airport on property leased from the Authority. The call center provides centralized 911 emergency call and response services to the entire County. The facility also serves as the Authority's Joint Information Center (JIC) and Emergency Operations Center (EOC) in the event of large-scale incidents.

Additional hangar facilities are maintained at Allegheny County Airport and are leased to various corporate, commercial, and private users.

AIRPORT SERVICE REGION

Pittsburgh International Airport is a medium-hub airport* and the domestic and international gateway to the Pittsburgh Primary Area. For the purposes of this study, the region served by the Airport includes a primary and secondary area. The Primary Area served by the Airport is the seven-county Pittsburgh Metropolitan Statistical Area (the Pittsburgh Primary Area or Pittsburgh MSA), a large population center in southwestern Pennsylvania, as shown in Table 1 and on Figure 3. The MSA is a statistical region defined by the U.S. Office of Management and Budget and consists of seven counties: Allegheny, Armstrong, Beaver, Butler, Fayette, Washington, and Westmoreland. According to the U.S. Department of Commerce, Bureau of the Census, the population of the MSA was 2.3 million in 2019, as shown in Table 1. In 2019, the Pittsburgh MSA accounted for 18% of the total population of Pennsylvania (12.8 million). Because economic growth and activity within the Pittsburgh Primary Area stimulate a significant portion of passenger demand at the Airport, statistics for the Pittsburgh MSA were used to evaluate airline traffic trends at the Airport.

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*Airports are classified by the FAA in terms of the percentage of total passenger boardings within the United States in the most current calendar year: large hubs—1% or more; medium hubs—at least 0.25%, but less than 1%; small hubs—at least 0.05%, but less than 0.25%; and non-hubs—more than 10,000 passenger boardings, but less than 0.05%.

Table 1
POPULATION DISTRIBUTION IN THE PITTSBURGH MSA
2019

County	Population	Percent of total
Allegheny	1,216,045	52.5%
Armstrong	64,735	2.8
Beaver	163,929	7.1
Butler	187,853	8.1
Fayette	129,274	5.6
Washington	206,865	8.9
Westmoreland	348,899	15.1
Total Pittsburgh MSA	2,317,600	100.0%

Note: MSA = Metropolitan Statistical Area.

Source: U.S. Department of Commerce, Bureau of the Census, www.census.gov, accessed April 2021.

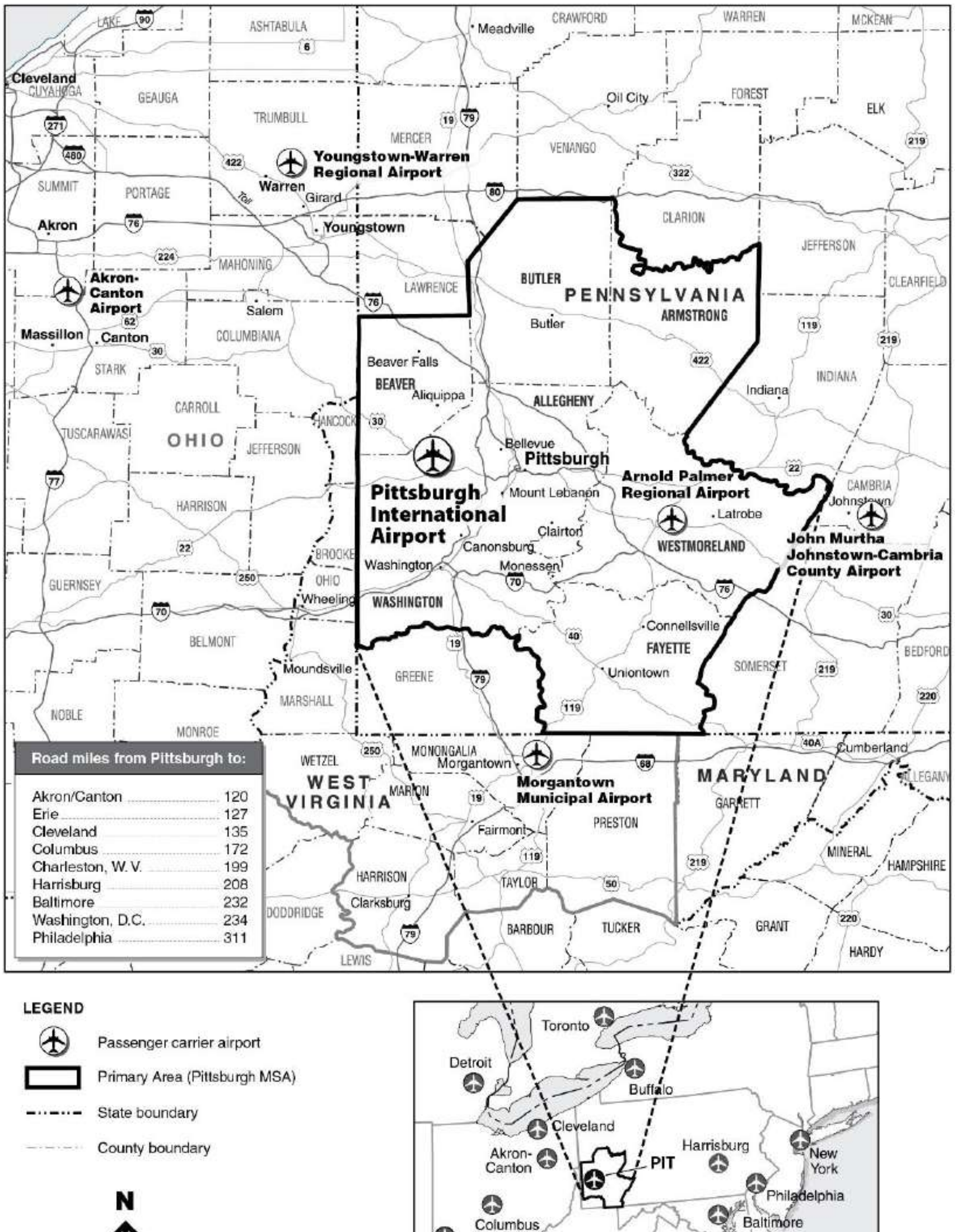
The Airport is located approximately 15 miles west of downtown Pittsburgh and, as the principal commercial service airport located within the Primary Area, lacks nearby competition. Limited commercial service is provided at Arnold Palmer Regional Airport (Latrobe), a non-hub airport located 44 miles east of Pittsburgh in Westmoreland County, with an average of 3 daily departures in July 2020 and 158,253 revenue enplaned passengers in 2019.

The secondary area served by the Airport, which includes many of the counties surrounding the primary area and extends into northern West Virginia and eastern Ohio, is defined in relation to the location of and driving distance to other commercial service airports, as well as by the availability, price, and quality of airline service at those other airports. Six airports with commercial passenger airline service are located in the secondary area, including three more than 100 miles from PIT and three within 100 miles but with limited scheduled airline service (as of April 2021)*:

- Cleveland-Hopkins International Airport, a medium-hub airport with an average of 81 daily departures (compared with 147 in April 2019) and 4.9 million revenue enplaned passengers in 2019, is located approximately 135 road miles northwest of Pittsburgh.
- John Glenn Columbus International Airport, a medium-hub airport with an average of 79 daily departures (compared with 141 in April 2019) and 4.2 million revenue enplaned passengers in 2019, is located approximately 172 road miles southwest of Pittsburgh.
- Akron-Canton Regional Airport is a non-hub airport located approximately 120 road miles Northwest of Pittsburgh with an average of 11 daily departures (compared with 22 in April 2019) and 407,646 revenue enplaned passengers in 2019.

*Advance airline schedules published for April 2021 are subject to change.

Figure 3
AIRPORT SERVICE REGION
Pittsburgh International Airport



- John Murtha Johnstown-Cambria County Airport, located 72 miles east of Pittsburgh, is a non-primary commercial service* airport with an average of 2 daily regional jet departures (compared with 4 in April 2019) and 6,309 revenue enplaned passengers in 2019.
- Morgantown Municipal Airport, located 80 miles south of Pittsburgh in Monongalia County, West Virginia, is a non-primary commercial service airport with an average of 5 daily regional jet departures in April 2019 and 2021 and 7,304 revenue enplaned passengers in 2019.
- Youngstown-Warren Regional Airport, located 81 miles northwest of Pittsburgh in Trumbull County, Ohio, is a non-primary commercial service airport. Scheduled passenger service was discontinued in January 2018 and has not resumed.

By comparison, PIT had 178 average daily departures and 4.9 million enplaned passengers in 2019.

Allegheny County Airport, located 10 miles south of Pittsburgh, is a general aviation airport, and part of the Authority's Airport System. Although it has no scheduled commercial airline service, it serves as the primary reliever airport for PIT.

AIRPORT ROLE

The Airport plays an important role in the national, Commonwealth, and local air transportation systems, as discussed in the following sections.

Commercial Service Airport Serving Pennsylvania and Adjacent States

The Airport is Pennsylvania's second-largest airport, as ranked by enplaned passengers reported to the Department of Transportation (DOT), with 4.7 million enplaned passengers in 2019. Philadelphia International Airport, the largest airport in the Commonwealth with 16.0 million enplaned passengers in 2019, is located 311 miles away in the southeastern part of the Commonwealth. Because of the driving distance to Philadelphia Airport, it is not considered a competitor of the Airport.

Medium-Hub Origin-Destination Passenger Airport

Figure 4 shows the number and share of origin-destination (O&D) passengers (i.e., these O&D passengers did not connect with another flight at the Airport) and connecting passengers at selected medium-hub airports in the United States in 2019 and 2020. As noted previously, the FAA classifies an airport as a medium-hub if it accounts for at least 0.25%, but less than 1% of total U.S. enplaned passengers in a calendar year. Generally, medium-hub airports are characterized by metropolitan populations averaging approximately 2.0 to 2.5 million people and a dominant share of O&D passengers.

Passenger traffic growth at a predominantly O&D airport is driven by the local economy and population base. In contrast, passenger traffic at an airport with a large share of connecting passengers is tied to the route network and strategies of the hubbing airline. As shown on Figure 4, 10 of the 11 medium-hub airports shown have shares of O&D passengers equal to or greater than 94% in 2019. Houston-Hobby Airport has an O&D passenger share less than 94% and is one of Southwest Airlines' busiest airports and, as such, accommodate a significant number of connecting passengers.

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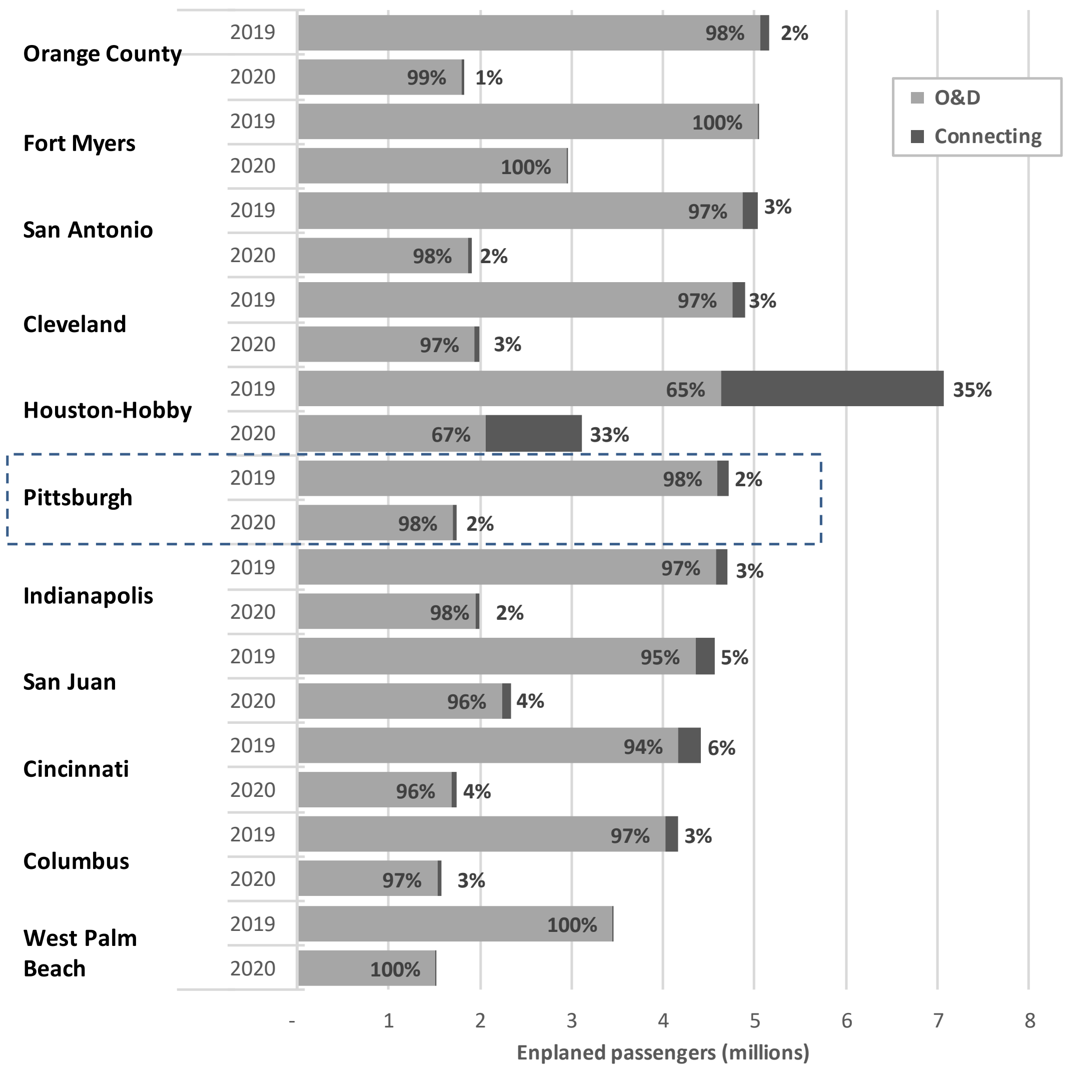
*As defined by the FAA, non-primary commercial service airports are publicly owned airports with scheduled passenger service that have at least 2,500 and no more than 10,000 passenger boardings each year.

Figure 4
ORIGIN-DESTINATION AND CONNECTING PASSENGERS AT SELECTED U.S. MEDIUM-HUB AIRPORTS IN 2019 AND 2020



Note: O&D = Origin-Destination passengers.

Sources: U.S. Department of Transportation (DOT), *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100; U.S. DOT, Schedule T100, accessed April 2021.

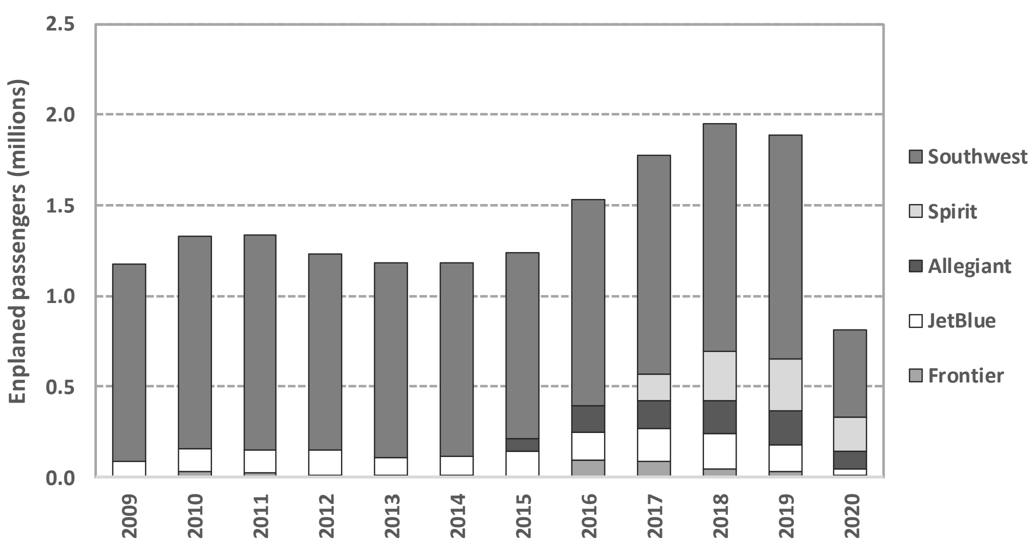
The Airport was the 46th busiest airport in the United States and the 16th busiest medium-hub airport, in terms of enplaned passengers, with 4.7 million in 2019 according to the U.S. Department of Transportation (DOT). In 2019, approximately 98% of passengers at the Airport were O&D passengers, as shown on Figure 4.

Between 2019 and 2020, total enplaned passengers at the selected medium-hub airports shown on Figure 4 decreased 57.3%, including a 57.1% decrease in O&D passengers and a 60.8% decrease in connecting passengers. In comparison, passenger traffic at the Airport decreased 62.9% between 2019 and 2020, including a 62.9% decrease in O&D passengers and a 63.7% decrease in connecting passengers.

Low Cost Carrier (LCC) Service

Between 2009 and 2019, the number of LCC passengers enplaned at the Airport increased from 1.2 million to 1.9 million—an average increase of 4.8% per year, as shown in Figure 5. In comparison, the number of LCC enplaned passengers at U.S. airports increased an average of 4.7% per year between 2009 and 2019. In 2020, LCC passengers decreased 57.0%, less than the 62.8% decrease for the Airport as a whole and similar to the 56% decrease at U.S. airports.

Figure 5
LOW COST CARRIER ENPLANED PASSENGERS
Pittsburgh International Airport
Ranked by 2019 passengers



Note: Low cost carriers = jetBlue and Southwest
Ultra low-cost carriers = Allegiant, Frontier, and Spirit

Source: Allegheny Country Airport Authority records.

The strongest growth in LCC enplaned passengers at the Airport occurred between 2015 and 2018 (an average increase of 16.4% per year) with the introduction of service by three ultra low-cost carriers (ULCCs)—Allegiant, Frontier, and Spirit. However, in 2019, the network airlines (in particular Delta and United) have increased at the fastest pace (an increase of 4.6%), compared with a 3.2% decrease in LCC and ULCC passengers. ULCCs operate using a business model driven by "unbundled fares" or a la carte pricing where amenities such as seat preferences, baggage, and in-flight food are available for additional fees. As a result, ULCCs can offer lower base price fares than mainline and traditional LCCs such as Southwest and jetBlue and tend to put downward pressure on overall airfares at an airport. In 2019, ULCCs accounted for 10.4% of enplaned passengers at the Airport, compared with 7.9% of revenue enplaned passengers at U.S. airports in 2019.* In 2020, ULCC's share of enplaned passengers at the Airport and at U.S. airports increased to 16.4% and 10.8%, respectively, reflecting the larger share of leisure passengers traveling during the pandemic.

Unlike traditional network airlines such as American, Delta, and United, ULCCs target underserved markets and populations with strong economic and demographic metrics and stimulate passenger demand with low airfares rather than develop route networks to reach an increasing number of destinations. It is not uncommon for an ULCC to withdraw service to a market if sufficient passenger traffic and revenues aren't realized.

ECONOMIC BASIS FOR PASSENGER AIRLINE TRAFFIC

This section provides a summary of the economic basis for airline traffic at the Airport, key factors affecting future airline traffic, and forecasts of enplaned passengers and aircraft landed weight.

ECONOMIC BASIS FOR AIRLINE TRAFFIC

The economy of the Pittsburgh MSA is an important determinant of long-term passenger demand at the Airport. Generally, regions with large populations, high levels of employment, and high average per capita incomes will generate strong demand for airline travel. The demographics and economy of the region—as measured by changes in population, employment, and per capita income—as well as airline service and airfares—are typically the most important factors affecting O&D passenger demand.

The following sections present a discussion of the economic basis for airline traffic at the Airport—historical population, employment, per capita personal income, and per capita gross domestic product (GDP) of the Pittsburgh MSA; industry clusters, and the visitor industry—and a summary of the economic outlook for the United States, the Commonwealth, and the MSA.

Population, Nonagricultural Employment, and Per Capita Personal Income

Table 2 presents comparative historical and projected trends in population, nonagricultural employment, and per capita personal income in the Pittsburgh MSA, the Commonwealth of Pennsylvania, and the United States in 2000, and from 2010 through 2020.

According to Jeffery Fraser, the managing editor of the Pittsburgh Quarterly, the Pittsburgh MSA is still dealing with structural changes resulting from the collapse of the steel industry in the 1980s when nearly 150,000 manufacturing jobs were lost resulting in an 8% reduction in the MSA population from 1980 to 1990. Most of the residents who left the MSA were young people in search of jobs due to the lack of jobs in the MSA, which left behind an aging population base. Given the loss of families in their child-bearing years, more people die each year in the MSA than are born. As a result, the Pittsburgh MSA is the only U.S. metro area to experience natural population loss. During the first 10 months of

*Frontier Airlines transitioned from a traditional LCC to an ULCC in 2014. Frontier served PIT as a traditional LCC in 2010 through 2014, discontinued service in 2015, and resumed service at PIT as an ULCC in 2016. U.S. ULCCs include Allegiant Air, Frontier Airlines, Spirit Airlines, and Sun Country.

the pandemic, nearly 3,000 people in the Pittsburgh MSA lost their lives, which will further reduce the natural population loss.*

Population. As shown in Table 2, from 2000 through 2019, the population of the Pittsburgh MSA decreased slightly, an average of 0.2% per year, from 2.43 million in 2000 to 2.32 million in 2019, compared to average annual increases of 0.2% and 0.8%, respectively, for Pennsylvania and the nation. The population decline in the Pittsburgh MSA reflects:

- A larger number of deaths than births due, in part, to the large share of Pittsburgh MSA residents were over the age of 65—21% in 2019 compared with 17% nationwide
- Net out-migration composed primarily of U.S. residents offset by international in-migration of both native and foreign-born populations**

The decline in the Pittsburgh MSA population has slowed in recent years, with a stabilization of the population base projected through 2028. The Southern Pennsylvania Commission (SPC) projects population in the Pittsburgh MSA to increase less than 0.1% per year, on average, between 2019 and 2028, less than the rate for the nation forecast by the U.S. Census Bureau.

A number of factors suggest that a stable Pittsburgh MSA population base will be accompanied by changes in its demographic profile, including:

- A large "millennial" population—in 2019, 26% of the Pittsburgh MSA population was aged 20 to 39 years, compared with 26% in Pennsylvania and 27% in the nation.***
- In the City of Pittsburgh, the average age in 2019 was 33, lower than both the Commonwealth (41) and the nation (39), reflecting its large millennial population.
- Pittsburgh ranked 4th in terms of downtowns by millennial share of population and was ranked by Forbes Magazine as a Top City for Millennials.
- In 2019, Pittsburgh ranked fourth among cities with characteristics best suited for millennials such as median priced housing and the availability of entry-level jobs, according to a study by Homes.com.****

Notwithstanding the Pittsburgh MSA's population decline, domestic O&D passengers at the Airport increased an average of 4.3% per year between 2014 and 2019, reflecting the expansion of LCC and ULCC service during this period which contributed to decreases in domestic airfares and stimulated air travel. Strong growth in passenger traffic at the Airport also reflects an increasing millennial population with a high propensity to travel and to use technology to facilitate travel. In 2019,

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* *Wanted: More People, COVID Clouds Greater Pittsburgh Already Shaky Population Outlook*, Pittsburgh Quarterly, Spring 2021.

** U.S. Census Bureau, Estimates of the Components of Resident Population Change: April 1, 2010, to July 1, 2019, released March 2020. Net international migration for the United States includes: (a) the net international migration of the foreign born, (b) the net migration between the United States and Puerto Rico, (c) the net migration of natives to and from the United States, and (d) the net movement of the Armed Forces population between the United States and overseas.

*** According to the Pew Research Center, millennials were born in 1981 through 1996. In 2018, millennials ranged in age from 22 through 37.

**** The New York Times, "The Best Cities, Ranked by Age Group," April 25, 2019.

millennials took more trips and spent more on travel that any other age group, according to travel insurance research.*

Nonagricultural Employment. Despite the slight decrease in population, nonagricultural employment in the Pittsburgh MSA increased an average of 0.2% per year between 2000 and 2019, similar to the growth rate for Pennsylvania, but slower than the growth rate for the nation, as shown in Table 2. During the period following the 2008-2009 economic recession, nonagricultural employment in the Pittsburgh MSA increased an average of 0.6% per year between 2010 and 2019, similar to the growth rate for Pennsylvania, but slower than the growth rate for the nation. Between 2019 and 2020, nonagricultural employment in the Pittsburgh MSA decreased 8.1%, similar to the decrease in Pennsylvania but greater than that for the nation, reflecting the impact of the COVID-19 pandemic and measures put in place to try to slow the spread of the disease, which contributed to a major contraction of the U.S. economy and substantial job losses. The SPC projects nonagricultural employment growth in the Pittsburgh MSA to increase 0.3% per year, on average, between 2019 and 2028, less than the growth rate for the nation forecast by the U.S. Department of Labor.

Per Capita Personal Income. As shown in Table 2, per capita personal income (in 2020 constant dollars) in the Pittsburgh MSA increased an average of 1.5% per year between 2000 and 2019, with stronger growth between 2010 through 2019, an average increase of 2.0% per year. In 2019, per capita income in the Pittsburgh MSA was $60,970, greater than that for Pennsylvania ($58,762) and the nation ($57,171). In 2020, per capita personal income in Pennsylvania and the United States increased 5.8% and 4.5%, respectively, reflecting large increases in state unemployment insurance compensation and economic impact payments provided for by the CARES Act as well as an expansion of eligibility of workers not previously covered by state unemployment compensation programs. Personal income data for the Pittsburgh MSA in 2020 are not yet available. The SPC projects per capita income (in constant dollars) in the Pittsburgh MSA to increase 1.5% per year, on average, between 2018 and 2028, similar to the rate for the nation (1.6%).

* "Research: Millennials spend more and travel more than any other age group," September 18, 2019, www.bhtp.com.

Table 2

HISTORICAL AND PROJECTED SOCIOECONOMIC TRENDS

Pittsburgh MSA, Commonwealth of Pennsylvania, and United States

	Population (thousands)			Nonagricultural employment (thousands)			Per capita personal income (2020 dollars)		
	Pittsburgh MSA	Commonwealth of Pennsylvania	United States	Pittsburgh MSA	Commonwealth of Pennsylvania	United States	Pittsburgh MSA	Commonwealth of Pennsylvania	United States
Historical									
2000	2,428	12,284	282,162	1,147	5,693	132,011	$46,152	$45,680	$46,076
2010	2,356	12,702	308,746	1,126	5,622	130,345	50,866	49,904	48,124
2011	2,360	12,747	311,583	1,145	5,686	131,914	51,947	50,857	49,170
2012	2,360	12,769	313,878	1,158	5,726	134,157	52,747	51,866	50,273
2013	2,360	12,780	316,060	1,158	5,741	136,364	52,379	51,550	49,829
2014	2,356	12,792	318,386	1,160	5,789	138,940	53,740	52,933	51,446
2015	2,348	12,790	320,739	1,162	5,835	141,825	55,934	55,020	53,509
2016	2,340	12,788	323,072	1,162	5,883	144,336	55,964	55,851	53,912
2017	2,329	12,795	325,122	1,173	5,941	146,608	57,632	56,253	55,006
2018	2,323	12,809	326,838	1,185	6,010	148,908	59,992	57,714	56,256
2019	2,318	12,799	328,330	1,193	6,066	150,905	60,970	58,762	57,171
2020	n.a.	12,783	329,484	1,096	5,603	142,185	n.a	62,198	59,729
Projected (a)									
2028	2,327	12,886	348,163	1,121	5,831	150,345	69,843	71,740	65,679
				Percent increase (decrease)					
2015-2016	(0.3)	(0.0)	0.7	0.1	0.8	1.8	0.1	1.5	0.8
2016-2017	(0.5)	0.0	0.6	0.9	1.0	1.6	3.0	0.7	2.0
2017-2018	(0.3)	0.1	0.5	1.0	1.2	1.6	4.1	2.6	2.3
2018-2019	(0.2)	(0.1)	0.5	0.7	0.9	1.3	1.6	1.8	1.6
2019-2020	n.a.	(0.1)	0.4	(8.1)	(7.6)	(5.8)	n.a	5.8	4.5
				Compound annual percent increase (decrease)					
2000-2010	(0.3%)	0.3%	0.9%	(0.2%)	(0.1%)	(0.1%)	1.0%	0.9%	0.4%
2010-2019	(0.2)	0.1	0.7	0.6	0.8	1.6	2.0	1.8	1.9
2000-2019	(0.2)	0.2	0.8	0.2	0.3	0.7	1.5	1.3	1.1
2019-2028	*(b)*	0.1	0.7	0.3	0.5	0.7	1.5	1.8	1.6

n.a. = Not available; MSA = Metropolitan Statistical Area, consisting of 7 counties as shown in Table 1.

(a) Based on growth rates forecast between 2019 and 2028. (b) Less than 0.1%.

Sources: Historical—U.S. Department of Commerce, Bureau of the Census, www.census.gov; U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov; U.S. Department of Commerce, Bureau of Economic Analysis, www.bea.gov, accessed April 2021. Adjusted to constant 2020 dollars using the U.S. Department of Labor, Consumer Price Index for Urban Consumers (1982-84 = 100), www.bls.gov.

Forecast—Southern Pennsylvania Commission (SPC), 2015-2045 Forecasts of Total Population, Households, Workplace Employment, and Per Capita Income, Cycle 11 Forecast, July 2019, www.spcregion.org. Commonwealth of Pennsylvania, Independent Fiscal Office (IFO), Economic and Budget Outlook, January 2021, www.ifo.state.pa.us. and Pennsylvania Department of Labor and Industry, Pennsylvania Industry Employment 2018-2028 Long-Term Projections, www.dli.pa.gov. IFO forecasts were extrapolated to 2028 by LeighFisher. U.S. Department of Commerce, Bureau of the Census, *2017 National Population Projections*, September 2018, www.census.gov; U.S. Department of Labor, Bureau of Labor Statistics, *Employment Projections: 2019-2029*, September 2020, www.bls.gov; IHS Markit as reported by Federal Aviation Administration, *FAA Aerospace Forecast, Fiscal Years 2020–2040*, March 2020, www.faa.gov.

Per Capita Gross Domestic Product. Per capita gross domestic product, in 2020 dollars, in the Pittsburgh MSA increased 2.1% between 2010 and 2019, compared with an average annual increase of 1.6% for the nation between 2010 and 2019.* In 2019, the MSA's per capita gross domestic product ($70,837) was 10.7% higher than the Pennsylvania average ($63,968) and 7.2% higher than national average ($66,085).

Educational Attainment. The Pittsburgh MSA's higher than average per capita income levels reflect the higher than average levels of education attained by Pittsburgh residents. In 2019, approximately 46% of Pittsburgh MSA residents over the age of 25 had earned post-secondary degrees (associate's degree or higher), compared with 41% of Pennsylvania residents, and 42% of U.S. residents overall, according to the U.S. Department of Commerce, Bureau of the Census. Higher levels of both education and income correlate with a greater propensity to travel by air.

The Pittsburgh MSA is home to numerous public and private institutions of higher education, including the University of Pittsburgh, Carnegie Mellon University, Duquesne University, Robert Morris University, Chatham University, and Carlow College. According to the U.S. Census Bureau's most recent American Community Survey, more than 135,000 students were enrolled in college or graduate programs in the Pittsburgh MSA in 2019. If extended beyond the MSA, but still within a roughly one-hour drive of downtown Pittsburgh, the number students enrolled in higher education increases to approximately 186,000 based on information from individual institution websites as of February 2020. The presence of these institutions of higher learning contributes to the MSA's higher levels of educational attainment and generates airline travel related to academic meetings and conferences, visiting professorships, and study-abroad programs, as well as individual travel by faculty, students, and their families. Additionally, close ties between the MSA's colleges and universities and the region's healthcare and technology industries (discussed in more detail in the Industry Clusters section) help to foster the development of related high-value businesses and entrepreneurial ventures.

Nonagricultural Employment by Industry Sector. Figure 6 shows a comparative distribution of nonagricultural employment by industry sector for the Pittsburgh MSA in 2000 and in 2020, and for Pennsylvania and the nation in 2020. The Pittsburgh MSA's business and financial services sector accounted for the largest share of employment in 2020, with 24.2%. Education and health services accounted for the second largest share of nonagricultural employment in 2020 (22.7%).

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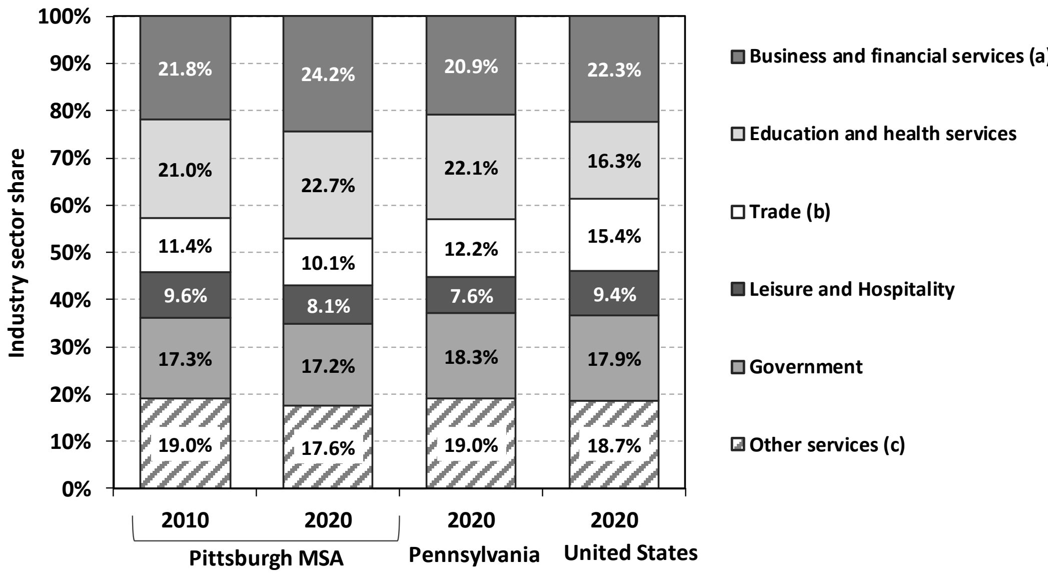
* Source: U.S. Department of Commerce, Bureau of Economic Analysis, www.bea.gov, accessed April 2021.

Figure 6
COMPARATIVE DISTRIBUTION OF NONAGRICULTURAL EMPLOYMENT



(a) Includes professional and business services, financial activity, and information.
(b) Includes trade, transportation, and public utilities.
(c) Includes manufacturing, mining and construction, and other services.

Source: U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov, accessed April 2021.

Unemployment Rates. In addition to the employment trends cited above, the unemployment rate is also indicative of the general economic climate. Table 3 shows comparative annual unemployment rates in the Pittsburgh MSA, the Commonwealth of Pennsylvania, and the nation for 2000 through 2020. The unemployment rates in the Pittsburgh MSA and Pennsylvania generally followed the trends in the nation, with unemployment rates in the Pittsburgh MSA higher than the national rate since 2016. In 2008 through 2010, unemployment rates in the Pittsburgh MSA, the Commonwealth of Pennsylvania, and the nation increased considerably as a result of the national economic recession. Between 2010 and 2019, Pittsburgh MSA unemployment rates decreased from 8.0% to 4.1%. In 2020, unemployment rates in the Pittsburgh MSA, the Commonwealth of Pennsylvania, and the nation increased significantly due to the COVID-19 pandemic and the resulting economic recession.

Table 3
COMPARATIVE UNEMPLOYMENT RATES

	Pittsburgh MSA	Commonwealth of Pennsylvania	United States
2000	4.4%	4.2%	4.0%
2001	4.8	4.8	4.7
2002	5.6	5.6	5.8
2003	5.9	5.7	6.0
2004	5.6	5.4	5.5
2005	5.3	5.0	5.1
2006	4.8	4.7	4.6
2007	4.5	4.6	4.6
2008	5.1	5.3	5.8
2009	7.3	8.0	9.3
2010	8.0	8.2	9.6
2011	7.4	7.8	8.9
2012	7.2	7.7	8.1
2013	6.8	7.1	7.4
2014	5.7	5.9	6.2
2015	5.3	5.4	5.3
2016	5.6	5.3	4.9
2017	5.0	5.0	4.4
2018	4.2	4.4	3.9
2019	4.3	4.5	3.7
2020	9.3 *(a)*	9.1	8.1

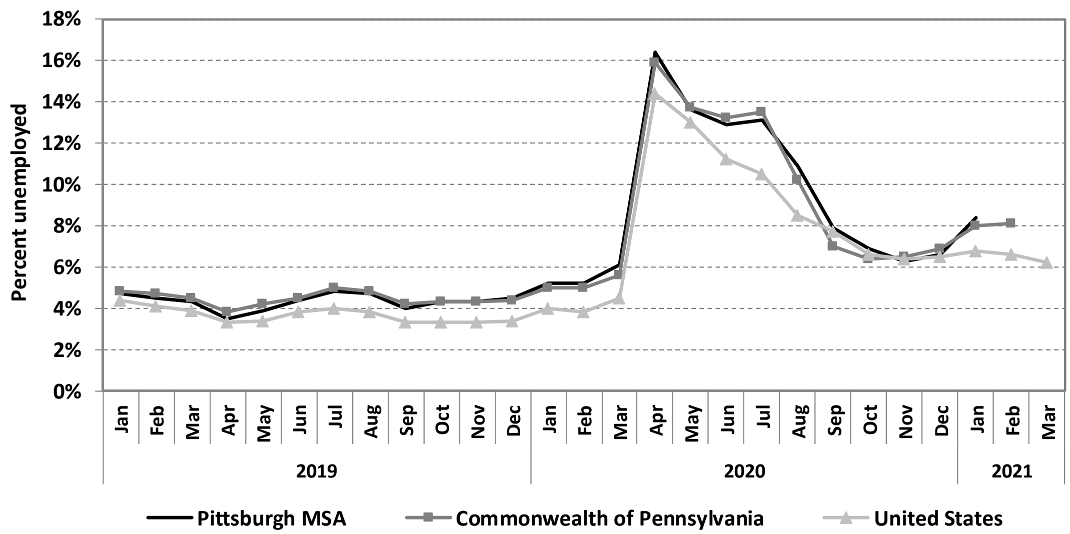
Note: Unemployment rates are not seasonally adjusted and represent annual averages.

(a) Estimated based on monthly data for January through December 2020.

Source: U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov, accessed April 2021.

Monthly unemployment rates in the Pittsburgh MSA, the Commonwealth of Pennsylvania, and the United States increased significantly in April 2020 following the start of the pandemic in March 2020, as shown on Figure 7. Unemployment rates have gradually decreased since April 2020 but remain higher than pre-pandemic levels. In January 2021, the unemployment rates in the Pittsburgh MSA and Pennsylvania were 8.4% and 8.0%, respectively, higher than the national rate (6.8%).

Figure 7
MONTHLY UNEMPLOYMENT RATES



Notes: Unemployment rates are not seasonally adjusted.

Source: U.S. Department of Labor, Bureau of the Labor Statistics, www.bls.gov, accessed April 2021.

Pittsburgh MSA Top 20 Employers. Table 4 lists the top 20 private sector employers in the Pittsburgh MSA (based on the number of Pittsburgh area employees). The table indicates a diversity of economic activity, as well as a strong presence of health care and financial and business services employers. Of these 20 employers, 16 are headquartered in the Pittsburgh MSA and 7 are listed on the Fortune 500 list of largest U.S. companies, ranked based on 2019 revenues (the most recent available).

While not shown in Table 4, the Pittsburgh MSA contains a substantial amount of public sector employment, including the U.S. Government (18,109 employees), the Commonwealth of Pennsylvania (12,218 employees), and Allegheny County (6,237 employees).

Table 4
PITTSBURGH MSA MAJOR NON-GOVERNMENTAL SECTOR EMPLOYERS

Employer	Product or service	Employees
University Pittsburgh Medical Center *(a)*	Education, healthcare	53,000
Highmark Health *(a)*	Healthcare	23,846
University of Pittsburgh *(a)*	Education	13,643
PNC Financial Services Group Inc. *(a)(b)*	Financial services	12,500
Giant Eagle Inc. *(a)*	Retail/grocer	9,864
Wal-Mart Stores Inc. *(b)*	Retail/grocer	9,000
BNY Mellon *(b)*	Financial services	7,000
Carnegie Mellon University *(a)*	Education	5,571
Eat'n Park Hospitality Group Inc. *(a)*	Hospitality	5,083
Excela Health *(a)*	Healthcare	4,309
United States Steel Corp. *(a)(b)*	Manufacturing	4,100
Heritage Valley Health System *(a)*	Healthcare	4,026
CVS Health *(b)*	Pharmaceuticals	3,200
Butler Health System	Healthcare	3,015
Westinghouse Electric Co. *(a)*	Nuclear power	2,800
Cigna	Health insurance	2,600
PPG *(a)(b)*	Paints and coatings	2,500
St. Clair Health Corp. *(a)*	Healthcare	2,500
Concordia Lutheran Ministries *(a)*	Healthcare	2,435
Verizon Communications *(b)*	Telecommunications	2,383

(a) Corporate headquarters are located in the Pittsburgh MSA.
(b) Ranked in 2020 Fortune 500 list of largest U.S. companies (based on 2019 revenue).

Source: Largest Pittsburgh-area Employers, Pittsburgh Business Times, www.bizjournals.com; Fortune Magazine, Fortune 500 Companies, 2020, www.fortune.com.

Industry Clusters

The MSA has undergone a long-term transformation from a steel manufacturing economy to a more diversified economy with strengths in advanced manufacturing, healthcare and life sciences, financial and business services, information technology and robotics, artificial intelligence, and energy and petrochemicals, according to the Pittsburgh Regional Alliance (PRA) and VisitPITTSBURGH.* These "industry clusters" are a coalescence of companies in the same industry operating in the same region and draw competitive advantage from their proximity to customers, suppliers, competitors, and a skilled workforce, and form a shared base of sophisticated knowledge about a given industry. These industry clusters are positioned to grow within the Pittsburgh MSA.

Advanced manufacturing. Manufacturing has always played an important role in the MSA. Although steel manufacturing has decreased over the years, advanced manufacturing, particularly in

*The Pittsburgh Regional Alliance (PRA) is the economic development marketing affiliate of the Allegheny Conference on Community Development; VisitPITTSBURGH, is the official tourism promotion agency for Allegheny County.

the fields of additive manufacturing, engineering, information technology, artificial intelligence, and robotics, has increased.

In October 2019, PIT announced plans for Neighborhood 91 (N91), the world's first development to locate all components of the additive manufacturing/3-D printing supply chain into a neighborhood concept. Neighborhood 91, developed in conjunction with the University of Pittsburgh, is the first development of the 195-acre Pittsburgh Airport Innovation Campus. Four companies have announced plans to establish operations at N91. Arencibia, a supplier of Argon gas used in additive manufacturing, has committed to be the anchor tenant. Webtac Corporation, a Fortune 500 company providing equipment, systems, digital solutions and value-added services for freight and transit rail, is the first manufacturing tenant in the first building opened in March 2021. In March 2021, Rusal America, a global supplier of aluminum additive manufacturing powder, announced plans to locate its operations at N91. In June 2021, Cumberland Additive, an additive manufacturing firm headquartered just outside Austin, announced plans to open its second location in N91 with a focus on large format machines. A January 2020 study projected that Neighborhood 91 would create nearly 6,000 jobs over the next decade as the first development in the world to condense and connect all components of the advanced manufacturing and 3D printing supply chain into one production ecosystem.[*] The MSA is home to 2,800 advanced manufacturing firms, employing over 95,000 people. These firms include Boeing, GE, PPG Industries, and Westinghouse Electric.

Health care and life sciences. Programs at both the University of Pittsburgh and Carnegie Mellon University support medical research in the MSA. There are more than 8,400 healthcare-related degrees awarded annually in the region and approximately 133,000 people employed in the healthcare industry at 5,400 firms. The University of Pittsburgh Medical Center Presbyterian, the MSA's largest employer, ranked nationally in eleven adult specialties and second in Pennsylvania according to the 2020-2021 U.S. News & World Report "Best Hospital Rankings". The University of Pittsburgh received more than $500 million in National Institutes of Health (NIH) medical research grants in Federal Fiscal Year 2020, ranking eighth in the nation in terms of grant funding.

Financial and business services. The financial and business services sector employs 230,000 people at 15,000 firms, including Bank of America, BNY Mellon, Highmark, and PNC. According to the Pittsburgh Regional Alliance, the MSA has an above average concentration of lawyers, accountants, and auditors. Pittsburgh has been ranked among the "Top 10 Cities for Starting a Business" according to Kiplinger and among the "Top 10 Least Costly Places to Do Business" according to KPMG.

Information Technology and Robotics. Information Technology (IT) and robotics is the leading sector for new job creation in the Pittsburgh MSA. The Pittsburgh region ranks second in the United States for IT degrees, with 4,100 IT graduates annually. Carnegie Mellon University, the "#1 Best Graduate Program" in Computer Science according to USA Today (2018) and the "Best Computer Science School" according to US News and World Report (2018), is home to the Robotics Institute, which offered the world's first doctoral degree in robotics and is currently one of only three institutions offering such a degree. The Pittsburgh MSA is home to 1,500 IT firms employing 28,000 people including ANSYS, Apple, Duolingo, Intel Research Pittsburgh, and Uber. The Brookings Institute has recognized Pittsburgh as a "rising global innovation city" and ranked Pittsburgh as one of eight

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[*] Neighborhood 91, Economic Impact Whitepaper, The Barnes Group Advisors, January 2020.

most digitally inclusive tech cities. Pittsburgh is one of five test cities for Argo AI's driverless cars. Ford and Volkswagen are investing a total of $4.6 billion in Argo AI, which is based in Pittsburgh.*

Energy and petrochemicals. Pittsburgh is the top U.S. exporter of coal, metal ore, and other non-metallic minerals. The MSA's energy sector employs 45,000 people and is home to 1,050 energy and petrochemical firms, including companies such as Chevron, Eaton, PPG Industries, and Shell Chemicals. Shell Chemicals is investing in a multi-billion dollar 386-acre Petrochemical complex in the Pittsburgh MSA, the first of its type built outside of the Gulf Coast region in more than 20 years.

The Pittsburgh MSA is located atop the Marcellus Utica, and other shale formations, among the largest shale formations in the United States, extending from West Virginia, through western Pennsylvania and eastern Ohio, into southern New York. Layers of rock in the Marcellus Shale trap natural gas, which can be extracted through drilling and hydraulic fracturing.

Between 2010 and 2019, natural gas production in Pennsylvania has grown an average of 43.2% per year, compared to average annual growth of 4.8% per year for the nation. As shown on Figure 8, Pennsylvania accounted for 17.0% of natural gas production in the United States in 2019, second behind Texas (24.0%). Total U.S. natural gas production increased 6.1% between 2019 and 2020, compared with a 5.4% increase in Pennsylvania. In 2020, Pennsylvania's natural gas production increased 8.2%, compared with a 2.4% decrease in the nation.

In its 2021 Annual Energy Outlook, the U.S. Department of Energy's Energy Information Administration (EIA) projected natural gas production in the United States to return to pre-pandemic levels in 2023 and, in the long term, continue to increase through 2050, driven by demand and opportunities to export liquid natural gas. The EIA expects shale gas and associated natural gas from oil to be the primary contributors to long-term growth. In 2010, shale gas accounted for 23% of the total domestic natural gas market. The 2021 Annual Energy Outlook projects that, by 2030, shale gas will account for nearly three-quarters of the U.S. natural gas market. In addition to a less favorable short-term outlook, there are some uncertainties regarding shale gas production as large portions of the known formations have little to no production history and extraction technologies continue to evolve rapidly. The shale industry has also been under increased scrutiny from Environmental, Social and Governance (ESG)-conscious investors and the public regarding the environmental impact of their operations, particularly the production of methane gas, a by-product of hydraulic "fracking" used to extract natural gas.**

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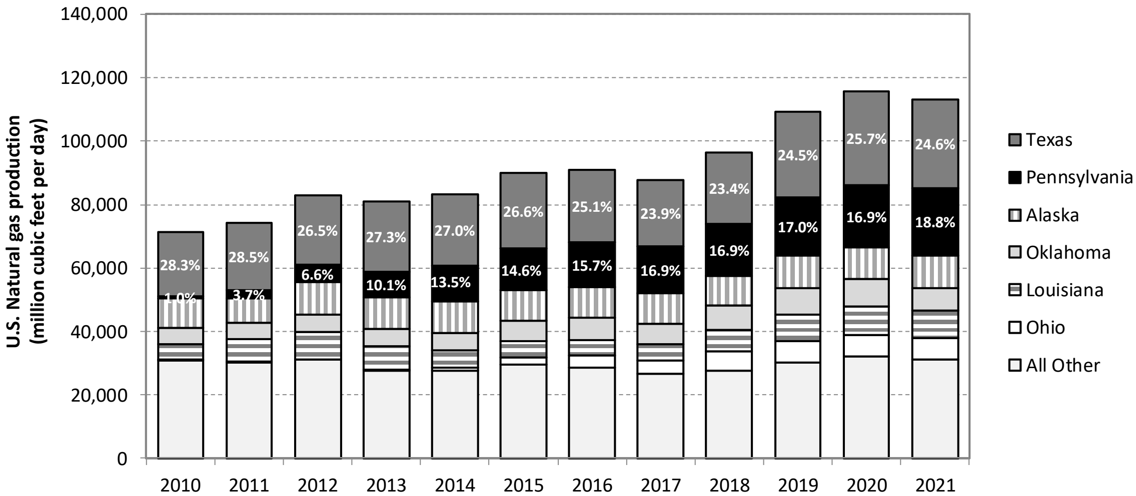
* Volkswagen To Invest Billions in Pittsburgh's Argo AI, Teaming With Ford To Put Autonomous Vehicles On Roads, CBS Pittsburgh, pittsburgh.cbslocal.com, July 12, 2019.

** For ESG investors, 'Clean Fracs' could mitigate environmental impacts, World Oil, Volume 242, No, 4, April 2021, www.worldoil.com.

Figure 8
U.S. NATURAL GAS PRODUCTION, BY STATE
(in million cubic feet per day, for January of years shown)



Source: U.S. Department of Energy, accessed April 2021.

Visitor Industry

VisitPITTSBURGH estimates that there are more than 12.6 million overnight trips to the Pittsburgh area annually. Visitors to the Pittsburgh area spent nearly $8.7 billion in the region in 2019 (the most recent data available), a new record high, and an increase of 2.5% from 2018.* According to research conducted by Tourism Economics, Allegheny County's tourism industry will have lost $3.6 billion in visitor spending and 24,540 jobs by the end of 2020 as a result of the measures taken to mitigate the spread of COVID-19. Pittsburgh is the only U.S. city in the London issue of National Geographic Travelers "Cool Cities to Visit in 2019". Pittsburgh was also listed by National Geographic as the "Best City in the United States," based on unconventional metrics believed to lead to happiness, such as green spaces, galleries, coffee shops, music venues, and more.**

The increasing popularity of Pittsburgh as a visitor destination reflects the range of historical, cultural, natural, and social attractions, including:

- Several highly renowned museums—the Carnegie Museum of Art, the Carnegie Museum of Natural History, and the Carnegie Science Center, and the Andy Warhol Museum, which houses the largest collection Warhol art and archives in the world
- Performing arts venues—the Pittsburgh Symphony Orchestra, the Pittsburgh Opera, the Pittsburgh Ballet, PNC Broadway, and City Theatre
- Three major league sporting teams—Pittsburgh Steelers in the National Football League, Major League Baseball's Pittsburgh Pirates, and the Pittsburgh Penguins in the National Hockey League—as well as numerous NCAA Division I and II sports teams. According to

*The Economic Impact of Travel in Pennsylvania, Calendar Year 2019, Tourism Economics, an Oxford Tourism Company, www.visitpa.com.
**According to VisitPITTSBURGH.

VisitPITTSBURGH, Pittsburgh was awarded 22 NCAA preliminary and championship events from 2018 through 2022, more than any other city.

- Regional historical attractions—the Duquesne Incline (a mountainside cable railway opened in 1877 to travel Mount Washington), the Heinz History Center, Fallingwater (a 1930 Frank Lloyd Wright designed home perched over a waterfall), the Frick Art and Historical Center, and the University of Pittsburgh's Cathedral of Learning
- Nature and parks—Phillips Conservatory and Botanical Gardens, Point State Park, Pittsburgh Zoo and Aquarium, the National Aviary, Schenley Park, Frick Park, and the Three Rivers Heritage Trail
- Shopping and dining—Pittsburgh Public Market on the Strip, Station Square, the Waterfront, and Squirrel Hill Shopping District

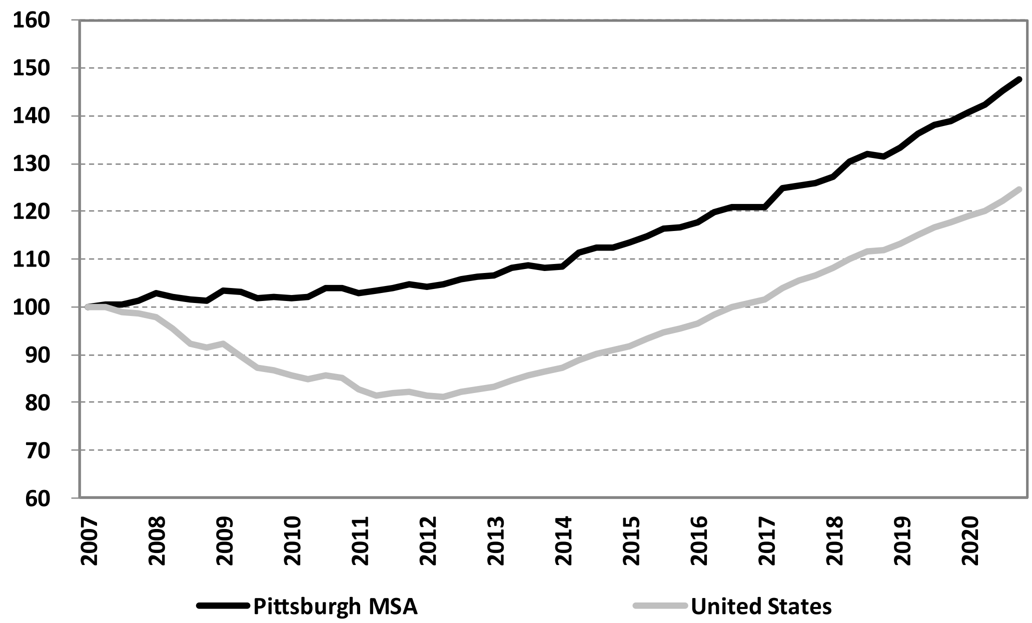
Conventions and tradeshows are hosted at the David L. Lawrence Convention Center, near downtown Pittsburgh. Featuring more than 300,000 square feet of exhibition space, 53 meeting rooms, and a 30,000-square foot ballroom, the facility is one of the largest LEED-certified "green" buildings in the world according to VisitPITTSBURGH.* The David L. Lawrence convention center welcomed approximately 442,100 convention attendees at nearly 550 events in 2019.

Housing Market

Trends in the housing market in a region generally follow economic cycles and are an indicator of overall economic activity that will, in turn, help to spur air travel demand. Since 2007, home prices in the Pittsburgh MSA have gradually increased, as shown on Figure 9. Between 2007 and 2020, home prices in the Pittsburgh MSA increased an average of 3.0% per year, compared with an average increase of 1.7% in the nation. During the 2008-2009 economic recession, home prices in the Pittsburgh MSA remained stable, while home prices in the United States as a whole decreased by nearly 20%.

* Leadership in Energy and Environmental Design (LEED) certification was developed by the U.S. Green Building Council and recognizes sustainable, environmentally friendly construction techniques.

Figure 9
INDEX OF HOME PRICES
Pittsburgh MSA and United States
(2007 = 100)



Source: U.S. Federal Housing Finance Agency, All-Transactions House Price Index, retrieved from FRED, Federal Reserve Bank of St. Louis, accessed April 2021.

Economic Outlook

The economic outlook for the United States, the Commonwealth of Pennsylvania, and the Pittsburgh MSA forms a basis for anticipated growth in airline traffic at the Airport. Economic activity in the Pittsburgh MSA and Pennsylvania is directly linked to the production of goods and services in the United States and the world. Both airline travel and the movement of cargo through the Airport depend on the economic linkages between and among the regional, Commonwealth, national, and global economies. The economic and other assumptions underlying the projections of enplaned passengers are based on a review of global, national, Commonwealth, and regional economic outlooks as well as an analysis of historical socioeconomic trends and airline traffic trends.

Global Economy. Globalization of the world economy has linked national economies, with positive impacts on travel as well as trade. The Pittsburgh MSA and the Commonwealth of Pennsylvania are connected to the global economy through a number of industry sectors. The economic growth of these sectors, in terms of GDP, is directly related to the growth in air travel. In its April 2021 World Economic Outlook, the International Monetary Fund (IMF) projects global GDP to increase 6.0% in 2021 and 4.4% in 2022, following an estimated 3.3% decrease in 2020 due to the global pandemic. Global GDP growth is expected to moderate to 3.3% per year over the medium-term, with the pace of recovery affected by the effectiveness of vaccines in containing new COVID-19 strains and policy actions in restoring economic stability.* Continued growth in the economies of the world regions most closely aligned with the Pittsburgh MSA economy and airline service at the Airport are expected to contribute to continued growth in passenger traffic at the Airport. The Shell plant being developed will link the Pittsburgh area to Shell's offices in Amsterdam and London, as well as in Houston.

U.S. Economy. The U.S. economy has grown at a slow to moderate pace since the 2008-2009 economic recession, with U.S. GDP growth, in 2012 dollars, averaging 2.3% per year between 2009 and 2019. In its February 2021 report (the most recent available), the Congressional Budget Office (CBO) projected U.S. economic growth, as measured by U.S. GDP in constant dollars, to have decreased 3.5% in 2020 as a result of the widespread economic disruption caused by the pandemic. U.S. GDP is projected to increase 4.6% in 2021 and 2.9% in 2022, reaching pre-COVID levels by 2022, and then increase an average of 2.0% per year between 2022 and 2028. The CBO projects that the U.S. unemployment rate will have averaged 8.1% in 2020 (up from an average of 3.7% in 2019) and decrease to 4.0% in 2028. According to the Bureau of Labor Statistics, the U.S. unemployment rate reached a high of 14.8% in April 2020 and decreased to 6.7% in December 2020—for an average unemployment rate of 8.1% for the year. For purposes of this projection, it is assumed that U.S. GDP growth will average approximately 2.0% per year through 2028.

Pennsylvania Economy. The Pennsylvania economy experienced growth consistent with the nation as a whole since the 2008-2009 economic recession, with Pennsylvania GDP growth, in 2012 dollars, averaging 1.8% per year between 2009 and 2019. In 2020, Pennsylvania's GDP decreased 4.4%, with the largest decreases in arts, entertainment, recreation, accommodation, and food services (a decrease of 30%) and accommodation and food services (a decrease of 25%). Pennsylvania's strong base of education, technology, and life sciences is expected to provide the state's economy with downside protection during the recovery from the recession. The Commonwealth's Independent Fiscal Office (IFO) forecasts Pennsylvania employment to return to pre-pandemic levels in 2026 (a six-year recovery period), reflecting increases in labor productivity, shifts in consumer spending patterns, the continuation of remote working, and reduced business spending. Demographic developments such as the aging of the population and slow population growth are recognized as factors that could impact economic growth. At the same time, these factors could be offset by an influx of outside labor responding to the demand for workers and lower housing costs that attract residents from neighboring states where home prices and taxes are much higher.

Pittsburgh MSA Economy. The Pittsburgh MSA's economy strengthened as employment grew steadily in 2018 and 2019, unemployment rates reached record lows, and GDP per capita and income per capita increased at rates similar to or exceeding national growth rates. In 2020, nonagricultural employment in the Pittsburgh MSA decreased 8.1%, greater than that for Pennsylvania and the nation with decreases of 7.6% and 5.8%, respectively. In the 2021 Economic Outlook for Pittsburgh, regional economists predicted that Pittsburgh's economy will lag the national pace of recovery in 2021. "Its diverse industrial base will help Pittsburgh regain pre-pandemic economic conditions but achieving that before a full national recovery is unlikely. Federal fiscal stimulus policies targeted at households and consumers will be of increased importance for markets such as Pittsburgh, where internal deficiencies will prolong recovery efforts and support. As a result, the pandemic's economic damage will linger that much longer in this region."** Regional economists expect "stronger job growth through the rest of 2021 as vaccine distribution accelerates and

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*International Monetary Fund, World Economic Outlook, April 2021, www.imf.org.

** Pittsburgh Quarterly, 2021 Economic Outlook, March 1, 2021, www.pittsburghquarterly.com.

economic activity increases."* Longer term economic growth will be supported by Pittsburgh's five industry sectors—Tech and Robotics, Advanced Manufacturing, Financial and Business Services, Energy, and Healthcare and Life Sciences, supported by a highly educated and skilled work force and continued investment in regional infrastructure.

HISTORICAL AIRLINE SERVICE AND TRAFFIC

Airlines serving the Airport; enplaned passenger trends; airline shares of passengers; origin-destination markets; airline service at the Airport; and airline fares are discussed in this section.

Airlines Serving the Airport

As of April 2021, a total of 25 passenger airlines served the Airport, including 4 U.S. mainline passenger airlines, 12 regional airlines, 2 low cost carriers, 3 ultra low-cost carriers, and 3 foreign-flag airlines, as shown in Table 5. Air Canada suspended its service to PIT in June 2020 due to the pandemic and plans to resume service in July 2021. British Airways has suspended its flights to PIT until June 2022 due to the pandemic. In addition, five airlines provided all-cargo service.

Table 5
PASSENGER AND CARGO AIRLINES SERVING PITTSBURGH INTERNATIONAL AIRPORT
July 2021

Mainline carriers	Low cost carriers
Alaska Airlines	Allegiant Air *(a)*
American Airlines	Frontier Airlines *(a)*
Delta Air Lines	jetBlue Airways
United Airlines	Southwest Airlines
	Spirit Airlines *(a)*
Regional airlines	**Foreign-flag airlines**
Boutique Air	Air Canada *(b)*
Breeze Airways	Condor *(c)*
Endeavor Air (Delta)	Sunwing
Envoy Air (American)	
Air Wisconsin (United)	**All-cargo airlines**
Go Jet (United)	FedEx
Mesa Airlines (United)	Qatar Cargo *(e)*
Piedmont Airlines (American)	Sun Country Airlines dba Amazon Air *(d)*
Republic Airlines (American, Delta, United)	UPS
SkyWest Airlines (American, Delta, United)	SpiceXpress
Southern Airways Express	
iAero Airways (previously Swift Air)	

(a) Ultra low-cost carrier (ULCC).
(b) Service suspended until July 2021. Operated by Jazz Aviation and Air Georgian.
(c) Condor provides seasonal service from May to September in each year.
(d) Sun Country initiated service on May 13, 2021 on behalf of Amazon Air.
(e) Qatar Cargo is the freight branch of Qatar Airways.
(f) SpiceXpress initiated service in July 2021 and is expected to operate through the end of 2021.
Sources: Allegheny County Airport Authority records.

* The PNC Financial Services Group, Market Expectations Survey, March 5, 2021, www.pnc.com.

The new upstart low-cost carrier Breeze Airways will begin nonstop service between Pittsburgh and Charleston, S.C. on July 8, 2021, and between Pittsburgh and Hartford, Providence, and Norfolk in late July offering four flights per week on 108 seat Embraer 195 aircraft. On August 2 Cathay Pacific will return to the Airport operating two weekly flights with Boeing 777-300ER aircraft converted from passenger to cargo operations for five months. This flight will originate in Vietnam and a stop in Hong Kong before arriving in PIT. On July xx SpiceXpress, the cargo division of Indian low cost carrier SpiceJet, initiated new twice-weekly service to PIT operating Airbus A340-300 aircraft that are expected to continue through the end of 2021.

Enplaned Passenger Trends

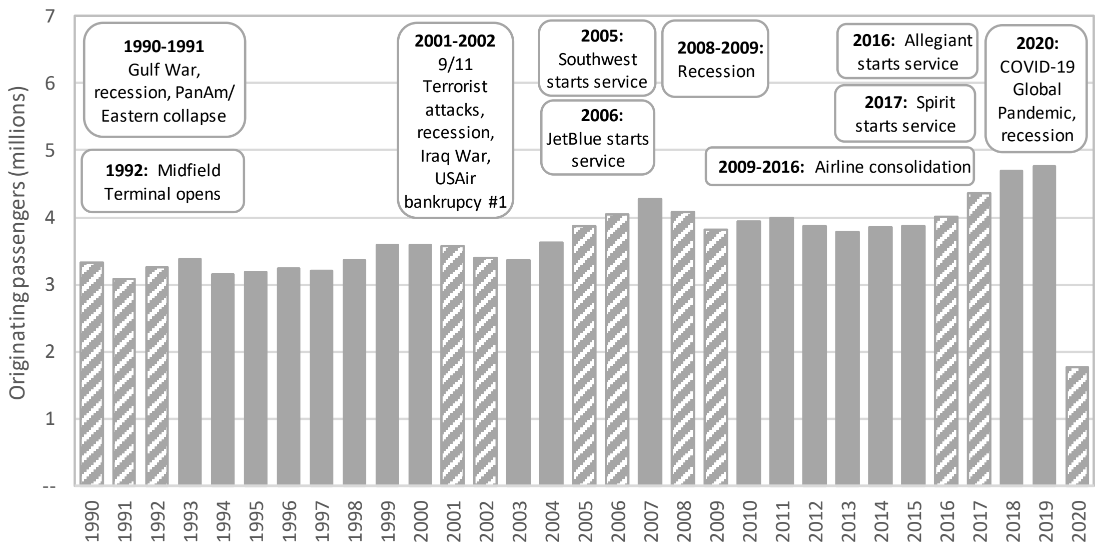
Through the late 1990s, the Airport served as the primary connecting hub airport in the route system of US Airways. The number of passengers enplaned at the Airport peaked at more than 10 million per year during the 1995-1998 peak period, as US Airways increased its level of service and connecting passenger flows. However, in the fall of 2002, US Airways significantly cut back flights at the Airport and over the next few years gradually dismantled its Pittsburgh hub. As a result, passenger levels decreased substantially, due almost entirely to a reduction in connections. Following US Airways' de-hub of the Airport, the number of passengers enplaned on LCCs increased as several LCCs began service at PIT including Southwest (2005), jetBlue (2006), Allegiant (2015), and Spirit (2017).

Figure 10 presents trends in originating passengers (excluding connecting passengers) at the Airport from 1990 (two years before the Midfield Terminal opened) through 2019 illustrating the continued long-term growth notwithstanding economic cycles and external events. The number of enplaned passengers at the Airport decreased in 2008 and 2009 in response to the economic recession. Figure 11 and Table 6 present enplaned passengers by type of carrier between 2009 and 2020 and show that enplaned passengers averaged approximately 4.0 million between 2009 and 2015. Between 2015 and 2018, the number of enplaned passengers at the Airport increased an average of 6.2% per year, driven largely by growth in low cost carrier passenger traffic (an average increase of 16.4% per year). In 2019, enplaned passengers increased 1.4% as compared to the same period of the prior year, due to increases by several carriers, including Delta and United, and new service by Alaska and British Airways. In 2020, the number of enplaned passengers at the Airport decreased 62.8%, reflecting the impact of the COVID-19 global pandemic and economic recession. During the first six months of 2021 (January through June), enplaned passengers increased 17.6% compared with the same period in 2020, including a three-fold increase in June, as shown in Table 6.

Airlines serving PIT adjusted their networks to largely focus on leisure travel given the shift in the profile of air travelers based on the recovery of leisure travel in lieu of business travel, which is still lagging. More than a dozen destinations will be served by new routes – some for the first time ever – in 2021 at PIT, including those by the new low-cost startup - Breeze Airways.

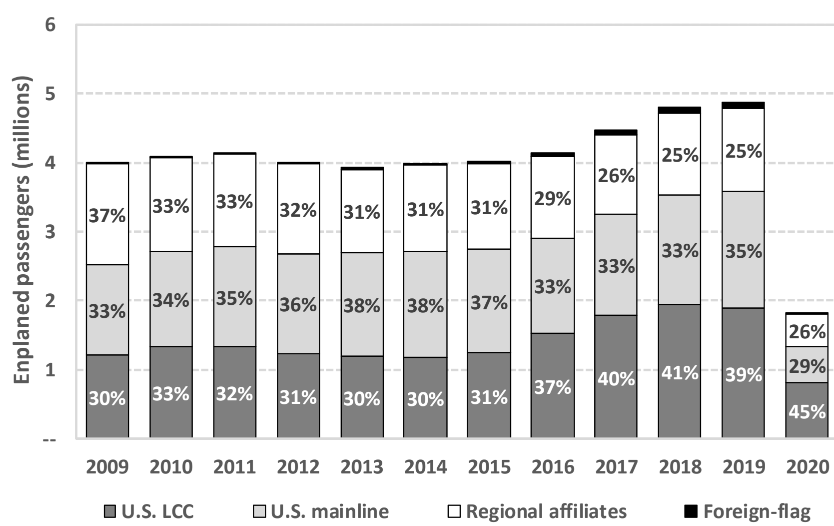
In 2019, LCCs accounted for 39% of enplaned passengers (up from 30% in 2009), while all other airlines accounted for the remaining 61%, including 35% on mainline airlines, 25% on regional airlines, and 2% on foreign-flag airlines. In 2019, international passengers accounted for 2.4% of total enplaned passengers. In 2020, LCCs' share of Airport enplaned passengers increased to 45%, while the share of all other airlines decreased to 55%, including 29% on mainline airlines, 26% on regional airlines, and less than 1% on foreign-flag airlines.

Figure 10
HISTORICAL ORIGINATING PASSENGERS AND EVENTS
Pittsburgh International Airport



Source: U.S. Department of Transportation, *Air Passenger Origin-Destination Survey* and Schedule T100, online databases, accessed April 2021 and Allegheny County Airport Authority records.

Figure 11
HISTORICAL ENPLANED PASSENGERS
Pittsburgh International Airport



Notes: Excludes nonscheduled passengers.

Source: Allegheny County Airport Authority records.

Table 6
HISTORICAL ENPLANED PASSENGERS
Pittsburgh International Airport

Year	Mainline airlines	Regional airlines	Foreign-flag airlines	Low cost carriers	Total	Annual percent increase (decrease)
2009	1,307,596	1,464,458	15,944	1,210,699	3,998,697	(7.8%)
2010	1,380,012	1,350,980	19,595	1,332,091	4,082,678	2.1
2011	1,435,140	1,348,940	22,508	1,337,192	4,143,780	1.5
2012	1,445,677	1,299,516	22,837	1,232,437	4,000,467	(3.5)
2013	1,512,011	1,208,660	22,452	1,184,870	3,927,993	(1.8)
2014	1,528,718	1,251,729	23,325	1,181,456	3,985,228	1.5
2015	1,500,462	1,241,332	33,069	1,238,237	4,013,100	0.7
2016	1,368,663	1,182,393	51,354	1,531,243	4,133,653	3.0
2017	1,470,628	1,150,467	73,659	1,778,134	4,472,888	8.2
2018	1,585,924	1,181,621	91,836	1,950,484	4,809,865	7.5
2019	1,696,643	1,199,542	90,789	1,888,048	4,875,029	1.4
2020	516,608	472,706	10,878	812,212	1,812,404	(62.8)
First 6 months (January-June)						
2020	296,170	273,249	10,878	444,350	1,024,647	
2021	286,162	331,089	--	587,515	1,204,766	17.6
	Annual percent increase (decrease)					
2016-2017	7.4%	(2.7%)	43.4%	16.1%	8.2%	
2017-2018	7.8	2.7	24.7	9.7	7.5	
2018-2019	7.0	1.5	(1.1)	(3.2)	1.4	
2019-2020	(69.6)	(60.6)	(88.0)	(57.0)	(62.8)	
2020-2021 *(a)*	(3.4)	21.2	(100.0)	32.2	17.6	
	Average annual percent increase (decrease)					
2009-2014	3.2%	(3.1%)	7.9%	(0.5%)	(0.1%)	
2014-2019	2.1	(0.8)	31.2	9.8	4.1	
2009-2019	2.6	(2.0)	19.0	4.5	2.0	

Note: Includes scheduled passengers only.
(a) Represents the percent change for the first six months (January through June).
Source: Allegheny County Airport Authority records.

Enplaned Passenger Trends by Residents, Visitors, and Connecting

Similar to the trend in overall enplaned passengers, area residents and visitors (non-residents) using PIT increased an average of 2.2% per year between 2009 and 2019, as shown in Table 7, with stronger growth of 4.2% and 4.6% per year, on average, respectively, between 2009 and 2014. Connecting passengers, which accounted for 2.4% of enplaned passengers at the Airport in 2019, decreased 4.2% per year, on average, between 2009 and 2019. Area residents accounted for 59% of O&D passengers at the Airport in 2018 and 2019, compared with 57% in 2000. Visitors accounted for the remaining 40% in 2019. In 2020, the number of passenger trips by area residents decreased 61.3%, less than the 65.0% decrease in visitor trips, reflecting the impact of the pandemic.

Table 7

PASSENGER TRAFFIC TRENDS BY RESIDENTS AND VISITORS

Pittsburgh International Airport

	Enplaned passengers (thousands)					Percent of O&D total		
	Outbound O&D *(a)*							
Year	Pittsburgh MSA residents	Visitors	Total	Connecting and other *(a)*	Total *(b)*	Pittsburgh MSA residents	Visitors	Percent connecting
2009	2,274,099	1,564,522	3,838,621	178,316	4,016,937	59.2%	40.8%	4.4%
2010	2,327,663	1,604,402	3,932,065	150,613	4,082,678	59.2	40.8	3.7
2011	2,360,611	1,627,358	3,987,969	155,811	4,143,780	59.2	40.8	3.8
2012	2,291,783	1,573,039	3,864,822	135,645	4,000,467	59.3	40.7	3.4
2013	2,234,247	1,549,163	3,783,410	144,583	3,927,993	59.1	40.9	3.7
2014	2,297,697	1,549,586	3,847,283	137,945	3,985,228	59.7	40.3	3.5
2015	2,275,526	1,587,957	3,863,483	149,617	4,013,100	58.9	41.1	3.7
2016	2,343,214	1,673,402	4,016,616	117,037	4,133,653	58.3	41.7	2.8
2017	2,562,703	1,792,113	4,354,816	118,072	4,472,888	58.8	41.2	2.6
2018	2,765,265	1,921,841	4,687,106	122,759	4,809,865	59.0	41.0	2.6
2019	2,816,130	1,942,331	4,758,461	116,568	4,875,029	59.2	40.8	2.4
2020	1,091,053	679,077	1,770,130	42,274	1,812,404	61.6	38.4	2.3
	Percent increase (decrease)							
2018-2019	1.8%	1.1%	1.5%	(5.0%)	1.4%			
2019-2020	(61.3)	(65.0)	(62.8)	(63.7)	(62.8)			
	Compound annual percent increase (decrease)							
2009-2014	0.2%	(0.2%)	0.0%	(5.0%)	(0.2%)			
2014-2019	4.2	4.6	4.3	(3.3)	4.1			
2009-2019	2.2	2.2	2.2	(4.2)	2.0			

Note: Includes scheduled passengers only.

(a) Based on data from U.S. Department of Transportation, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.

(b) Allegheny County Airport Authority records.

Enplaned Passenger Market Shares

In 2019, Southwest accounted for 25.3% of all passengers enplaned at the Airport. As shown in Table 8 and on Figure 12, American accounted for the second largest share in 2019 with 23.3%, followed by Delta with 18.9%, United with 15.6%. Other airlines, such as Spirit, jetBlue, and Allegiant, together accounted for the remaining 16.9% in 2019, up from 5.3% in 2009, as new LCCs began service at PIT. In 2020, the ranking of the busiest seven airlines remained unchanged. However, LCCs and ULCCs accounted for a larger share of enplaned passengers at the Airport, increasing from 38.7% in 2019 to 44.8% in 2020.

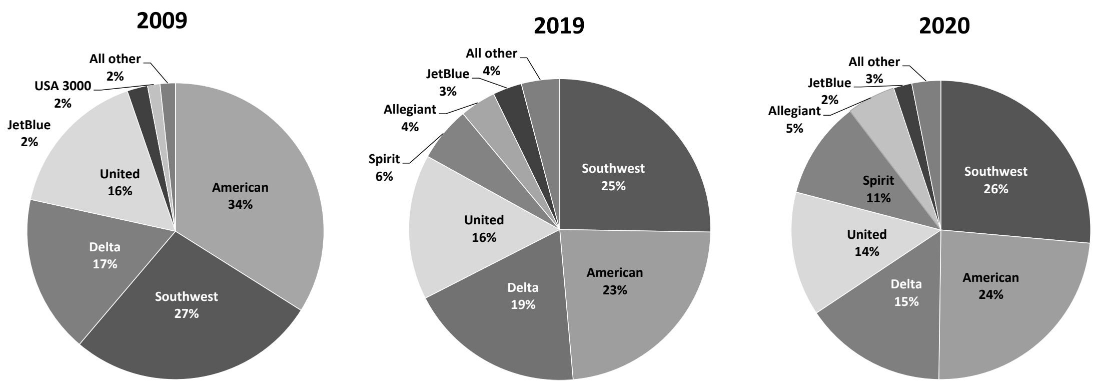
Table 8
ENPLANED PASSENGERS BY AIRLINE
Pittsburgh International Airport
Ranked by 2019 passengers

	Enplaned passengers			Percent of total		
Airline	2009	2019	2020	2009	2019	2020
Southwest	1,089,413	1,231,855	478,707	27.2%	25.3%	26.4%
American	1,357,625	1,136,330	431,438	34.0	23.3	23.8
Delta	689,693	921,353	279,350	17.2	18.9	15.4
United	651,699	759,498	243,810	16.3	15.6	13.5
Spirit	--	286,901	191,058	--	5.9	10.5
Allegiant	--	187,874	95,561	--	3.9	5.3
jetBlue	89,319	151,570	35,900	2.2	3.1	2.0
Air Canada	15,944	55,220	6,320	0.4	1.1	0.3
Alaska	--	50,897	25,040	--	1.0	1.4
Frontier	--	29,848	10,986	--	0.6	0.6
British Airways	--	25,909	4,558	--	0.5	0.3
Southern Airways	--	20,536	8,012	--	0.4	0.4
All Other	105,004	17,238	1,664	2.6	0.4	0.1
Airport Total	3,998,697	4,875,029	1,812,404	100.0%	100.0%	100.0%

Notes: Passengers reported by regional affiliates have been grouped with their respective code sharing partners. Data for merged airlines are reported together, i.e., Alaska and Virgin America, American and US Airways, Southwest and AirTran, United and Continental.
Includes scheduled passengers only.
Percentages may not add to 100% due to rounding.

Sources: Allegheny County Airport Authority records.

Figure 12
AIRLINE MARKET SHARES OF ENPLANED PASSENGERS
Pittsburgh International Airport



Notes: Data for merged airlines are reported together, i.e., Alaska and Virgin America, American and US Airways, Southwest and AirTran, United and Continental. Includes scheduled passengers only.

Source: Allegheny County Airport Authority records.

Origin-Destination Markets

Table 9 shows the top 20 domestic destination markets for passengers originating their journeys at the Airport in 2019 and 2020. These 20 markets accounted for 68.0% of the total scheduled airline domestic O&D passengers at the Airport in 2019 and 65.2% in 2020. Orlando and New York are the top two destination markets, with 7.0% and 6.7%, respectively, of the total domestic O&D passengers at the Airport in 2019. Other major destinations include Chicago, Miami, and Boston. However, in 2020, Orlando and Miami, both leisure destination markets, accounted for the largest share of domestic O&D passengers, with 8.2% and 6.4%, respectively. Two other leisure destination markets in Florida—Tampa and Fort Myers—also increased their share of the Airport's O&D passengers in 2020.

Each of the top 20 domestic destinations was served nonstop from the Airport in 2019 and 2020, although the number of average daily departures decreased from 126 in 2019 to 71 in 2020 due to the pandemic. In April 2021, 19 of the top 20 domestic destinations are expected to be served nonstop (except for San Francisco).

Table 9
DOMESTIC PASSENGER DESTINATION PATTERN AND AIRLINE SERVICE
Pittsburgh International Airport
Ranked by 2019 Domestic O&D passengers

2019 Rank	Origin-destination market	Air miles from Pittsburgh	Percent of domestic O&D passengers 2019	Percent of domestic O&D passengers 2020	Scheduled average daily nonstop domestic departures 2019	2020	April 2021	May 2021
1	New York *(a)*	332	7.0%	4.3%	24	9	5	6
2	Orlando	835	6.7	8.2	5	4	4	5
3	Chicago *(b)*	408	5.1	3.4	16	9	7	8
4	Boston	494	4.7	2.7	9	3	1	3
5	Miami *(c)*	1,002	4.4	6.4	5	4	4	5
6	Los Angeles *(d)*	2,130	3.9	3.9	1	1	*(i)*	*(i)*
7	Atlanta	526	3.9	3.9	10	6	7	7
8	Tampa	874	3.8	4.9	3	2	3	3
9	Las Vegas	1,905	3.5	3.6	2	2	1	2
10	Dallas/Ft. Worth *(e)*	1,063	3.3	3.4	5	4	4	4
11	Denver	1,286	3.2	3.6	4	3	4	4
12	Houston *(f)*	1,123	3.1	3.0	6	3	2	2
13	San Francisco *(g)*	2,248	2.9	1.9	2	*(i)*	--	--
14	Phoenix	1,809	2.2	2.4	2	1	1	1
15	Fort Myers	967	2.2	3.3	2	1	3	2
16	Washington, D.C. *(h)*	198	2.0	1.3	10	6	6	6
17	Nashville	461	1.6	1.6	2	2	2	2
18	Philadelphia	266	1.6	1.0	5	3	2	3
19	Charlotte	366	1.5	1.6	8	6	8	8
20	Minneapolis-St. Paul	725	1.4	1.1	4	3	3	3
	Total—top 20 markets		68.0%	65.2%	126	71	66	73
	All other markets		32.0	34.8	35	27	22	23
	Total—all markets		100.0%	100.0%	161	98	89	96

Notes: Totals may not add due to rounding.

(a) Newark Liberty International, LaGuardia, and John F. Kennedy International airports.
(b) Chicago O'Hare and Midway International airports.
(c) Miami and Fort Lauderdale international airports.
(d) Los Angeles International, Hollywood Burbank, Ontario International, John Wayne (Orange County), and Long Beach airports.
(e) Dallas-Fort Worth International Airport and Love Field.
(f) Bush Intercontinental Airport/Houston and William P. Hobby airports.
(g) San Francisco, Oakland, and Mineta San Jose International airports.
(h) Reagan Washington National, Baltimore/Washington International Thurgood Marshall, and Washington Dulles International airports.
(i) Less than one daily flight on average.

Sources: Originating percentage: U.S. Department of Transportation, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100, accessed April 2021.
Departures: OAG Aviation Worldwide Ltd., OAG Analyser database, accessed April 11, 2021. Advance airline schedules are subject to change. Schedules out more than one month have been revised downward (sometimes significantly) during the COVID-19 pandemic.

Airline Airfares

Passenger traffic at an airport is influenced by the cost of travel which can be measured in terms of average airfares or airline yield (the airfare paid to fly one mile). Figure 13 provides a comparison of changes in numbers of domestic O&D passengers and average domestic one-way airfares paid at the Airport and in the nation in 2000 through 2020. The data show both increases in passenger traffic that correspond to decreases in PIT airfares and, conversely, decreases in passenger traffic following increases in PIT airfares. In particular:

- In 2008 and 2009, the airline industry weathered a national economic recession as well as increases in oil prices that spiked in June 2008 and resulted in the cessation of service by certain LCCs and charter airlines. In addition, the airline industry as a whole became more focused on managing capacity and demand which contributed to airfare increases during the following years.

- Between 2009 and 2014, PIT's domestic O&D passengers decreased an average of 0.9% per year in response to increases in PIT domestic airfares (an average increase of 8.3% per year). In comparison, U.S. domestic airfares increased an average of 5.6% per year between 2009 and 2014 and U.S. domestic O&D passengers increased an average of 1.4% per year.

- Airline service by new ultra low-cost carriers (ULCCs) and existing LCCs increased at PIT between 2014 and 2018, which contributed to a decrease in airfares. As a result, PIT's domestic O&D passengers increased an average of 5.6% per year between 2014 and 2018 in response to decreases in PIT domestic airfares (an average decrease of 3.7% per year). U.S. domestic O&D passengers increased during this period (an average increase of 6.0% per year), reflecting decreases in U.S. domestic airfares (an average decrease of 2.5% per year).

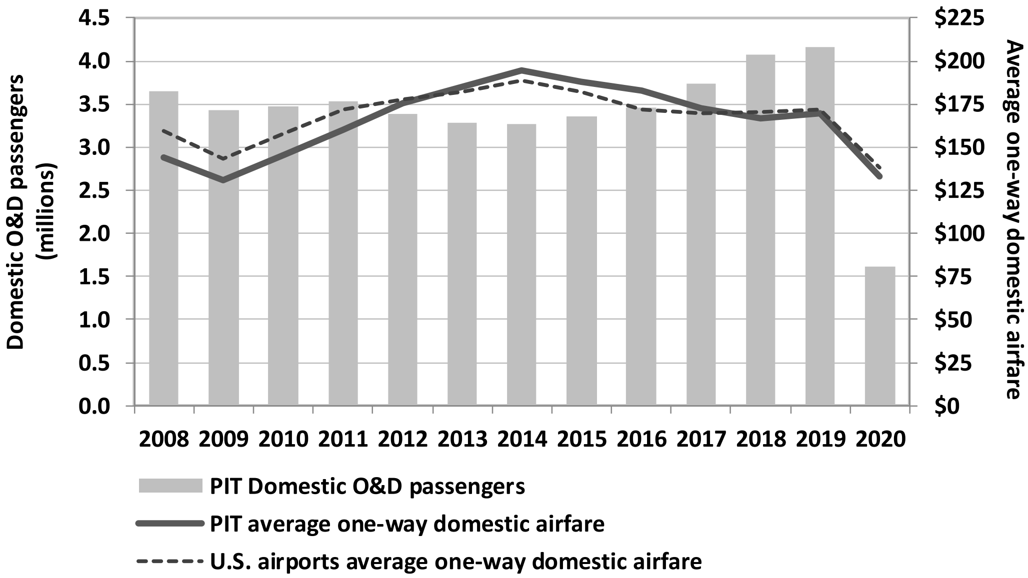
- In 2019, PIT's domestic O&D passengers increased 2.4%, notwithstanding a 1.5% increase in PIT domestic airfares. Similarly, U.S. domestic O&D passengers increased 4.7% in 2019, despite a 1.0% increase in U.S. domestic airfares.

- In 2020, PIT's domestic O&D passengers decreased 61.3% in response to the pandemic, while PIT domestic airfares decreased 21.6%. Similarly, U.S. domestic O&D passengers decreased 59.2% in 2020, despite a 19.5% decrease in U.S. domestic airfares.

As shown on Figure 4, O&D passengers accounted for approximately 98% of total passengers at the Airport in 2019 and 2020. The number of O&D passengers includes the "pure" domestic passengers shown on Figure 10 who start and end their journeys within the United States, more than 300,000 passengers who boarded domestic flights at the Airport to international destinations via other U.S. gateways, and passengers who boarded international flights at the Airport.

The average airfares shown on Figure 13, as reported by the airlines to the U.S. DOT, exclude ancillary charges, such as those for checked baggage, preferred seating, in-flight meals, entertainment, and ticket changes that have become widespread in the airline industry since 2006. As a result, the average airfares shown understate the amount actually paid by airline passengers for their travel, particularly in later years. Ancillary charges that were previously included in the ticket price are not all separately reported to the U.S. DOT. They have been estimated by industry analysts to amount to an effective average surcharge on domestic airfares of approximately 5% of ticket fare revenues, although the percentage varies widely by airline and airport.

Figure 13
TRENDS IN DOMESTIC O&D PASSENGERS AND AIRFARES
Pittsburgh International Airport and U.S. Airports



Note: Average one-way fares shown are net of all taxes, fees, and PFCs, and exclude ancillary fees charged by airlines.

Source: U.S. Department of Transportation, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100, accessed April 2021.

Airline Service

In April 2021, passenger airlines are scheduled to provide a total of 89 average daily nonstop domestic departures from PIT and no international departures due to pandemic-related travel restrictions, as shown in Table 10. Scheduled nonstop service is expected to 38 domestic destinations in April 2021, compared with 56 in 2019 before the pandemic. In 2019, airline service from PIT was provided to 5 international destinations—London England; Frankfurt, Germany; Montreal, Canada; Toronto, Canada; and Cancun, Mexico. British Airways expects to resume its London service in mid-2022.

Scheduled departing seats increased 8.7% in 2017, 5.2% in 2018, and 1.1% in 2019, as compared to the previous year. In 2020, scheduled departing seats decreased 41.0% as a result of the pandemic and economic recession. In May 2021, scheduled departing seats at PIT are expected to increase 17.3% compared with April 2021 based on advance airline schedules. Schedules out more than one month have been revised downward (sometimes significantly) during the COVID-19 pandemic.

Table 10

TRENDS IN AVERAGE DAILY DEPARTURES AND SEATS BY AIRLINE

Pittsburgh International Airport

Ranked by 2019 seats

	Scheduled average daily nonstop departures				Scheduled average daily nonstop departing seats			
Airline	2019	2020	April 2021	May 2021	2019	2020	April 2021	May 2021
Domestic								
Southwest	27	19	18	20	4,178	2,932	2,806	3,147
American	39	21	19	21	3,805	2,007	1,852	2,088
Delta	30	16	14	16	3,149	1,584	1,391	1,628
United	27	13	12	12	2,524	1,153	996	965
Spirit	6	5	5	6	948	840	924	1,163
jetBlue	5	2	1	2	543	213	113	229
Allegiant	3	3	4	3	517	488	554	553
Southern Airways Express	19	15	13	12	173	139	116	112
Alaska	1	1	1	1	167	208	176	176
Frontier	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*
Boutique	3	3	2	2	22	21	15	15
ViaAir	*(a)*	--	--	--	*(a)*	--	--	--
Subtotal--Domestic	161	98	89	96	16,123	9,638	8,997	10,129
International								
Air Canada	4	1	--	--	219	45	--	--
British Airways	*(a)*	*(a)*	--	--	*(a)*	*(a)*	--	--
Other airlines *(b)*	*(a)*	--	--	--	*(a)*	--	--	--
Subtotal--International	5	1	--	--	351	89	--	--
Total	166	100	89	96	16,474	9,727	8,997	10,129
Summary by airline type								
Domestic								
Low cost carriers	42	29	28	33	6,276	4,525	4,451	5,145
Mainline/network airlines	97	51	46	50	9,646	4,952	4,415	4,857
Other airlines	22	18	15	14	200	161	131	127
Subtotal--Domestic	161	98	89	96	16,123	9,638	8,997	10,129
International								
Foreign-flag airlines	5	1	--	--	310	72	--	--
Other airlines	*(a)*	*(a)*	--	--	*(a)*	*(a)*	--	--
Subtotal--International	5	1	--	--	351	89	--	--
Total	166	100	89	96	16,474	9,727	8,997	10,129
Percent of total								
Domestic								
Low cost carriers	25.4%	29.1%	31.6%	33.8%	38.1%	46.5%	49.5%	50.8%
Mainline/network airlines	58.4	51.5	51.9	51.4	58.6	50.9	49.1	47.9
Other airlines	13.3	18.2	16.6	14.8	1.2	1.7	1.5	1.3
Subtotal--Domestic	97.0%	98.9%	100.0%	100.0%	97.9%	99.1%	100.0%	100.0%
International								
Foreign-flag airlines	2.9%	1.0%	0.0%	0.0%	1.9%	0.7%	0.0%	0.0%
Other airlines	0.1	0.1	0.0	0.0	0.2	0.2	0.0	.0
Subtotal--International	3.0%	1.1%	0.0%	0.0%	2.1%	0.9%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Notes: Totals may not add due to rounding.

(a) Less than one average daily departure.

(b) Includes less than daily service by Condor, Delta, Allegiant, WOW, Southwest, and Spirit in 2019.

Sources: OAG Aviation Worldwide Ltd., OAG Analyser database, accessed April 11, 2021. Advance airline schedules are subject to change. Schedules out more than one month have been revised downward (sometimes significantly) during the COVID-19 pandemic.

Several new airlines have started service at the Airport since 2017:

- Spirit (May 2017) to Dallas/Fort Worth and Myrtle Beach (seasonal) and later expanded service to Fort Lauderdale, Fort Myers (seasonal), Las Vegas, Los Angeles, Orlando (seasonal), and Tampa
- Condor (June 2017) to Frankfurt, Germany (seasonal)
- Alaska (September 2018) to Seattle
- Boutique (November 2018) to Johnstown (PA)
- British Airways (April 2019) to London, England
- Breeze Airways (July 2021) to Charleston, S.C, Norfolk, Hartford, and Providence.

Several existing airlines also added service to new destinations, including additions by Air Canada (Montreal, Canada), Allegiant (Sarasota, West Palm Beach, and Nashville, and seasonal service to Fort Walton Beach/Destin), Key West, Norfolk, and Rapid City, American (Orlando), Delta (Boston, Raleigh-Durham, and Salt Lake City), Southwest (Myrtle Beach and Sarasota), Spirit (Cancun), and United (seasonal service to Charleston, Hilton Head Island, Pensacola and Portland).

In September 2017, Porter ceased service at PIT. In August 2018 and January 2019, respectively, OneJet and WOW Air ceased system-wide operations.

As noted earlier, the new upstart low-cost carrier Breeze Airways will begin nonstop service between Pittsburgh and Charleston, S.C. on July 8, 2021, and between Pittsburgh and Hartford, Providence, and Norfolk in late July offering four flights per week on 108 seat Embraer 195 aircraft.

Air Cargo

Over the last several years, the Authority identified increasing air cargo as one of its top strategic initiatives with a focus on the key influencers of freight lanes in the air cargo industry. Specifically, the Authority has spent time on ensuring that logistics providers for major shippers are aware of the benefits of PIT and its geographic location to provide enhanced levels of speed, ease of use, and efficiency compared to other airports. To date, the results of this effort have been productive with logistics providers redirecting consumer goods and high value products to PIT as evidenced by increased tonnage moving through the Airport to shipping distribution centers in North America. The growth in cargo has developed from a diverse combination of integrator and e-commerce business on UPS, FedEx, and Amazon Air, growth in international all-cargo aircraft serving the airport, and the introduction of widebody international passenger flights capable of handling cargo in the belly of the aircraft.

As shown in Table 11, total air cargo at PIT increased an average of 2.2% per year between 2009 and 2019, with stronger growth from 2014 to 2019 (an average increase of 3.4% per year) due largely to growth by all-cargo airlines, including increases by Fed Ex and UPS, as well as new freighter service by Qatar initiated in 2017. During this time, international passenger flights commenced on aircraft capable of handling air cargo in the belly of the aircraft to markets such as Frankfurt and London. In 2019, air cargo tonnage increased 2.4%, from 2018, due entirely to an increase by all-cargo airlines, including Qatar, which more than doubled its cargo volume during this period. In 2019, passenger airlines accounted for 6.5% of total air cargo at the Airport, while cargo airlines accounted for 93.5%.

In 2020, total air cargo at the Airport decreased 2.4%, reflecting the impact of the pandemic and the economy as well as a decrease in air cargo on passenger airlines as the number of passenger flights and available belly capacity for air cargo were reduced due to the pandemic. In contrast, all-cargo airlines handled slightly more air cargo in 2020 (an increase of 0.1%). In December 2020, Qatar Airways resumed cargo service at PIT, following a temporary suspension in December 2019 and continues its weekly flight on a converted Boeing 777-300ER. Additionally, Cathay Pacific used a similar aircraft for cargo flights between Pittsburgh and Hong Kong that ran twice weekly from September to November of 2020.

During the first six months of 2021 (January through June), total air cargo at the Airport increased 19.6%, reflecting an 18.4% increase by all-cargo airlines and a 46.1% increase by passenger airlines. In May 2021, cargo tonnage increased 22.6% compared to May 2020. The spike in air freight is attributed to cargo carriers utilizing larger aircraft and increasing the number of operations at PIT. For the first five months of 2021 FedEx increased its operations at PIT 26% relative to the same period in 2020 and UPS increased by 45%. On May 13, 2021, Amazon Air initiated service to PIT with one daily Boeing 737-800F freighter to Fort Worth Alliance Airport. In addition to Qatar and Cathay Pacific, Finnair also provided all cargo service from Helsinki to PIT with Airbus A350-900 aircraft in April and May 2021 and SpiceXpress initiated service in July 2021 operating Airbus A340-300 aircraft from Vietnam.

At congested cargo gateways like New York and Chicago, airlines and freight forwarders often have to wait days to get their products offloaded and on the road. At PIT, that can happen in a matter of hours. Cargo carriers have consistently referenced that speed as a major selling point to utilize PIT. The Authority also signed a memorandum of understanding with Ted Stevens Anchorage International last summer to collaborate in better streamlining the global air cargo supply chain.

In September 2020, Amazon opened its newly constructed 1 million-square-foot fulfillment center located about 3 miles from the Airport, where roughly 1,000 employees pack and ship products* In March 2021, Amazon announced its lease of 270,000 square feet for a sortation facility in Findlay, located about 6 miles from the Airport.**

The Authority is currently designing a new Cargo 4 facility construction that will provide a new nearly 80,000 square foot cargo processing facility and associated aircraft and vehicular parking.

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* Amazon opens fulfillment center in the Pittsburgh area, September 29, 2020, www.pennlive.com.

** Another Delivery: Amazon to open sortation center in Findlay business park, March 17, 2021, www.post-gazetter.com.

Table 11
TOTAL AIR CARGO TONNAGE
Pittsburgh International Airport

Year	Passenger airlines	All-cargo airlines	Total Cargo	Annual percent increase (decrease)	Percent of total: Passenger airlines	Percent of total: All-cargo airlines
2009	6,190	73,159	79,348		7.8%	92.2%
2010	7,278	77,983	85,261	7.5%	8.5	91.5
2011	8,216	79,756	87,972	3.2	9.3	90.7
2012	6,522	81,084	87,605	(0.4)	7.4	92.6
2013	6,288	79,924	86,212	(1.6)	7.3	92.7
2014	5,549	77,863	83,412	(3.2)	6.7	93.3
2015	6,674	78,770	85,444	2.4	7.8	92.2
2016	6,537	85,083	91,620	7.2	7.1	92.9
2017	6,798	84,233	91,031	(0.6)	7.5	92.5
2018	6,902	89,486	96,389	5.9	7.2	92.8
2019	6,422	92,246	98,667	2.4	6.5	93.5
2020	3,958	92,322	96,280	(2.4)	4.1	95.9
First 6 months (January-June)						
2020	2,042	42,943	44,986	--	4.5	95.5
2021	2,984	50,829	53,813	19.6	5.5	94.5
	Percent increase (decrease)					
2018-2019	(7.0%)	3.1%	2.4%			
2019-2020	(38.4)	0.1	(2.4)			
2020-2021 *(a)*	46.1	18.4	19.6			
	Compound annual percent increase (decrease)					
2009-2014	(2.2%)	1.3%	1.0%			
2014-2019	3.0	3.4	3.4			
2009-2019	0.4	2.3	2.2			

Note: Includes enplaned and deplaned freight and mail.
(a) Represents the percent change for the first six months (January through June).
Source: Allegheny County Airport Authority records.

KEY FACTORS AFFECTING FUTURE AIRLINE TRAFFIC

In the near-term to medium-term, the impact of the COVID-19 pandemic and the speed of recovery of both the economy and public confidence in the aviation system will significantly affect aviation activity levels at the Airport and, as of the date of this Report, there is great uncertainty regarding the length of time it will take for aviation activity levels to recover to 2019 levels. As the Airport predominantly serves origin and destination activity (O&D passengers account for approximately 98% of PIT's passengers), future long-term growth in aviation activity at the Airport (subsequent to recovery from the COVID-19 pandemic) will occur largely as a function of the growth in the population and economy of the Pittsburgh MSA, as well as regional, national, and international economic performance.

Several factors will play a role in the long-term growth in aviation activity at the Airport, including:

- The COVID-19 pandemic and public health concerns
- National economic conditions
- International economic and political conditions
- Structural changes in the travel market
- Financial health of the airline industry
- Airline service and routes
- Airline competition and airfares
- Airline consolidation and alliances
- Availability and price of aviation fuel
- Aviation safety and security concerns
- Capacity of the national air traffic control system
- Capacity of the Airport

COVID-19 Pandemic and Public Health Concerns

Since 2002, public health concerns and associated restrictions on travel have reduced airline travel demand to and from various parts of the world. Examples are Severe Acute Respiratory Syndrome (SARS) in 2002-2003, the H1N1 influenza virus in 2009, Middle East Respiratory Syndrome (MERS) in 2013, Ebola Virus Disease (EVD) in 2014-2016, and the Zika virus in 2016-2017. In all these historical examples, reductions in airline travel were geographically localized and fairly short-lived, with travel soon recovering to pre-health-scare trends.

The COVID-19 pandemic has had far more serious and far-reaching effects on airline travel worldwide. At the end of 2019, the highly contagious novel coronavirus that causes the COVID-19 respiratory illness emerged in Asia, soon spreading to most parts of the world. COVID-19 was declared a global pandemic by the WHO in March 2020 and has yet to be contained.

Governmental actions to slow the spread of the disease, including the mandated closure of businesses and offices, work-at-home requirements, prohibitions of public gatherings, quarantines, and travel restrictions have contributed to a recession in the global economy and widespread job losses. The economic recession, combined with continuing fears about contagion, resulted in a severe reduction in the demand for air travel, the grounding of much of the world's airline fleets, and cuts in airline service. Since April 2020, airline service in the United States has gradually been restored. Similarly, TSA data indicate that the number of passengers enplaned at U.S. airports increased from 40% in January 2021 to 74% in June 2021 of the number of passengers enplaned in during the same months in 2019 and for several days in July 2021 exceeded the previous peak 2019 levels.

As described earlier, the COVID-19 vaccines currently being rolled out to the public could potentially lead to a return to more normal economic activity (and possibly initiate a return to more normal conditions in the aviation industry) during the latter half of calendar year 2021.

The global economic disruption and reduction in airline travel caused directly and indirectly by the COVID-19 pandemic dwarfs the effects of earlier public health scares and will have far-reaching implications for the global airline industry, perhaps extending for several years. Until governments and public health authorities are able to contain the spread and occurrence of the disease through the widespread availability of effective vaccines, and reverse the associated economic impacts, COVID-19 is likely to overshadow all other factors affecting future airline travel.

Questions also remain about how some determinants of travel demand may change even once control of the pandemic and economic recovery eventually allow a "new normal" travel environment to be restored. For example, permanent reductions in some business travel for in-person meetings may result from the widespread adoption of videoconferencing by workers who have become accustomed to working from home.

National Economic Conditions

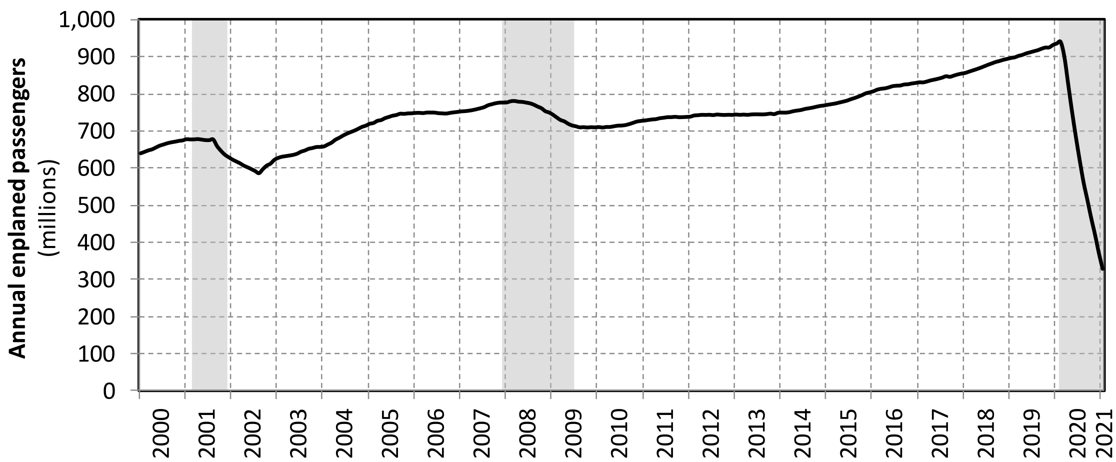
Historically, airline passenger traffic nationwide has correlated closely with the state of the U.S. economy and levels of real disposable income. As illustrated on Figure 14, recessions in the U.S. economy in 2001 and 2008-2009 and associated high unemployment reduced discretionary income and contributed to reduced airline travel demand in those years. Sustained future increases in passenger traffic at the Airport will depend on national economic growth.

International Economic and Political Conditions

Passenger traffic at U.S. airports is also influenced by the globalization of business and increased importance of international trade and tourism, international economics, trade balances, currency exchange rates, government policies, and geopolitical relationships.

Concerns about hostilities, terrorist attacks, and other perceived security and public health risks, and associated travel restrictions also affect travel demand to particular international destinations. Beginning in March 2017, the Trump administration issued various orders seeking to restrict travel to the United States from certain countries, mainly in the Middle East and Africa. Following court challenges, in June 2018, the U.S. Supreme Court upheld the administration's most recent travel restrictions. As the restrictions are implemented, increased scrutiny by U.S. Customs and Border Protection could prevent or discourage some airline travel. Sustained future increases in passenger traffic at the Airport will depend on global economic growth, stable and secure international conditions, and government policies that do not unreasonably restrict international travel.

Figure 14
HISTORICAL ENPLANED PASSENGERS ON U.S. AIRLINES



Notes: Data shown are 12-month moving averages of enplaned passengers on scheduled and non-scheduled flights to domestic and international destinations.

Sources: Bureau of Transportation Statistics, T100 Market and Segment, www.rita.gov, accessed April 2021; National Bureau of Economic Research, U.S. Business Cycle Expansions and Contractions, www.nber.com.

Structural Changes in the Travel Market

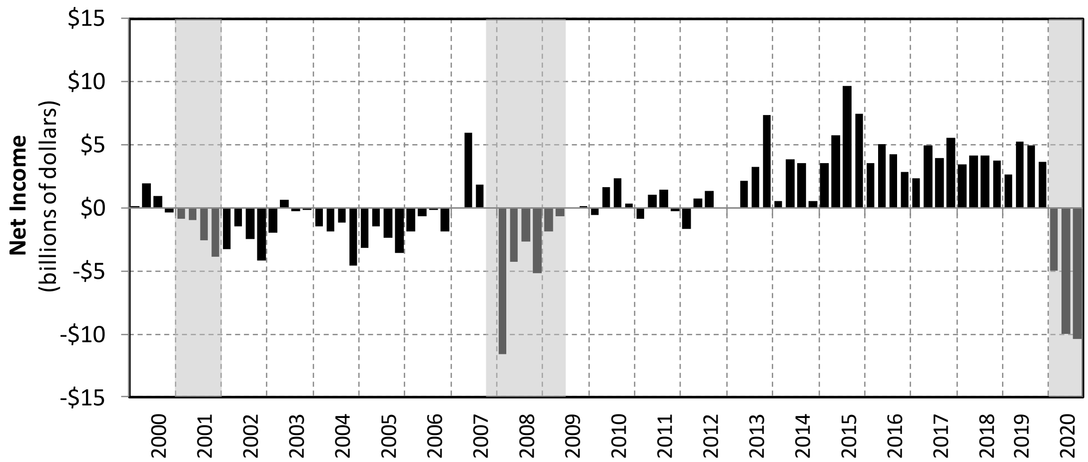
With the globalization of business and the increased importance of international trade and tourism (prior to the onset of COVID-19), international economics, trade balances, currency exchange rates, government policies, and political relationships all influence passenger traffic at major U.S. airports. Concerns about hostilities and other perceived security and public health risks and associated travel restrictions also affect travel demand to and from particular international destinations. Once the economy and the aviation system recover from the effects of the COVID-19 pandemic, it is expected that sustained future increases in passenger traffic at the Airport will once again depend on factors such as global economic growth, stable and secure international conditions, and government policies that do not materially restrict international travel.

Financial Health of the Airline Industry

The number of passengers using the Airport will depend partly on the profitability of the U.S. airline industry and the associated ability of the industry and individual airlines to make the necessary investments to provide service. Figure 15 shows historical net income for U.S. airlines.

As a result of the 2001 economic recession, the disruption of the airline industry that followed the September 2001 attacks, increased fuel and other operating costs, and price competition, the industry experienced huge financial losses. From 2001 through 2006, the major U.S. passenger airlines collectively recorded net losses of approximately $46 billion. To mitigate those losses, all of the major network airlines restructured their route networks and flight schedules and reached agreements with their employees, lessors, vendors, and creditors to cut costs, either under Chapter 11 bankruptcy protection or the possibility of such. Between 2002 and 2005, Delta Air Lines, Northwest Airlines, United Airlines, and US Airways filed for bankruptcy protection and restructured their operations.

Figure 15
QUARTERLY NET INCOME (LOSS) FOR U.S. AIRLINES



Notes: Includes scheduled service on U.S. carriers only.

Data for the fourth quarter of 2005 and the first quarter of 2006 were adjusted to account for United bankruptcy claims which were settled for less than had been originally reported.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Net Income, F41 Schedule P12, www.transtats.gov, accessed April 2021.

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

From 2010 to 2013, the U.S. passenger airline industry recorded net income of approximately $18 billion, notwithstanding sustained high fuel prices, by controlling seat capacity and nonfuel expenses, increasing airfares, achieving high load factors, and increasing ancillary revenues. Between 2009 and 2013, the airlines collectively increased domestic seat-mile capacity by an average of just 1.0% per year. American filed for bankruptcy protection in 2011.

In 2014, the U.S. passenger airline industry reported net income of $9 billion, assisted by reduced fuel prices. In 2015, the industry achieved record net income of $26 billion as fuel prices decreased further, demand remained strong, and seat capacity control allowed average fares and ancillary charges to remain high. Strong industry profitability continued in 2016 through 2019. U.S. passenger airline profits decreased by $5 billion during the first quarter of 2020 and by $10 billion during both the second and third quarters of 2020 as a result of the reduction in demand related to the COVID-19 pandemic.

Recent agreements between the major airlines and their unionized employees have resulted in increased labor costs. According to Airlines for America, U.S. airlines increased wages and benefits per full-time employee by 34% between 2013 and 2019. Contributing to the increased costs, a shortage of qualified airline pilots, resulting from retirements and changed FAA qualification standards and duty and rest rules, has required the airlines to increase salaries and improve benefits to attract and retain pilots.

The CARES Act provided for $50 billion in aid for passenger airlines, including $25 billion for the Payroll Support Program (PSP) and $25 billion in loans. Under the PSP, direct grants accounted for 70% of an airline's total support payment, with the remaining 30% made in the form of a loan. PSP funding ended on September 30, 2020. Passenger airlines were also eligible to apply for $25 billion in loans under the CARES Act.* Several U.S. airlines have received loans under the CARES Act, including Alaska, American, Frontier, Hawaiian, jetBlue, Mesa, Republic, Sky West, and United.** U.S. passenger airlines also offered voluntary separation programs and extended non-paid leave to maintain an appropriately sized workforce in response to the decreased demand for air travel related to the pandemic. Such programs provided employees with the opportunity to voluntarily end their employment in exchange for severance, healthcare coverage, and travel privileges and to voluntarily take extended emergency time off. Several airlines have taken other measures to bolster liquidity, including debt issuances and stock offerings. After the conditions of the CARES Act expired, approximately 32,000 airline employees were furloughed.

In December 2020, a second stimulus package was passed which included an additional $15 billion in payroll support for passenger airlines. As a condition of the package, airlines will have to put furloughed workers back on the payroll through March 2021. The third pandemic relief bill, the ARP enacted in March 2021, includes $14 billion of aid for airlines, $8 billion for airports, and $1 billion for aviation contractors to help them operate normally, limit the spread of the virus, and pay workers and service their debts. In exchange for the aid, airports, contractors and airlines are prohibited from large layoffs through September 2021.

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

Airline Service and Routes

Most large airports serve as gateways to their communities and as connecting points. The number of origin and destination passengers at an airport depends on the intrinsic attractiveness of the region as a business and leisure destination, the propensity of its residents to travel, and the airline fares and service provided. The number of connecting passengers, on the other hand, depends entirely on the

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* National Law Review, "Passenger Airlines and U.S. Treasury Department Reach Agreement on CARES Act Payroll Support Program," April 17, 2020, www.natlawreview.com. "In accordance with the CARES Act, all aid recipients must use the payroll support payments exclusively to cover the cost of payroll and benefits. Each passenger airline must comply with the required terms and conditions of the CARES Act, such as (1) refraining from imposing involuntary furloughs on US-based employees or reducing employee pay or benefits through September 30; (2) maintaining certain limitations on executive compensation through March 24, 2022; (3) suspending the payment of dividends or other distributions and cease stock buybacks through September 30, 2021; and (4) continuation of service as is reasonable and practicable under Department of Transportation regulations."

** Congressional Research Service, "Treasury and Federal Reserve Financial Assistance in Title IV of the CARES Act (P.L. 116-136)", updated January 6, 2021.

airline service provided. As discussed in the earlier section, "Enplaned Passengers," approximately 98% of passengers at the Airport are originating their journeys rather than connecting between flights.

The network airlines have developed hub-and-spoke systems that allow them to offer high-frequency service in many city-pair markets. Because most connecting passengers have a choice of airlines and intermediate airports, connecting traffic at an airport depends on the route networks and flight schedules of the airlines serving that airport and competing hub airports. Since 2003, as the U.S. airline industry has consolidated, airline service has been or is being drastically reduced at many former connecting hub airports in addition to PIT, including those serving St. Louis (American 2003-2005), Dallas-Fort Worth (Delta 2005), Las Vegas (US Airways 2007-2010), Cincinnati (Delta 2009-2011), Memphis (Delta 2011-2013), and Cleveland (United 2014).

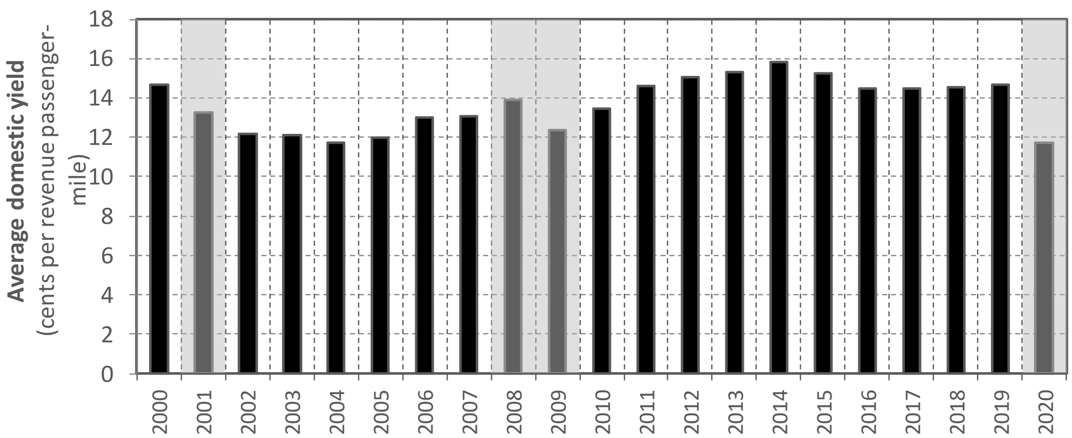
Airline Competition and Airfares

Airline fares have an important effect on passenger demand, particularly for relatively short trips for which the automobile and other travel modes are potential alternatives, and for price-sensitive "discretionary" travel. The price elasticity of demand for airline travel increases in weak economic conditions when the disposable income of potential airline travelers is reduced. Airfares are influenced by airline capacity and yield management; passenger demand; airline market presence; labor, fuel, and other airline operating costs; taxes, fees, and other charges assessed by governmental and airport agencies; and competitive factors. Future passenger numbers, both nationwide and at the Airport, will depend, in part, on the level of airfares.

Figure 16 shows the historical average domestic yield (airfare per passenger-mile) for U.S. airlines. Overcapacity in the industry, the ability of consumers to compare airfares and book flights easily via the Internet, and the 2001 recession combined to reduce the average yield between 2000 and 2004. The average yield then increased between 2004 and 2008 before again decreasing during the 2008-2009 recession. The average yield then increased between 2009 and 2014 as airline travel demand strengthened and the airlines collectively reduced available seat capacity and were able to sustain airfare increases. Between 2014 and 2016, the average yield decreased but, since 2016, average yield has been fairly stable.

Beginning in 2006, ancillary charges were introduced by most airlines for optional services such as checked baggage, preferred seating, in-flight meals, and entertainment; thereby increasing the effective price of airline travel more than these yield figures indicate.

Figure 16
HISTORICAL DOMESTIC YIELD FOR U.S. AIRLINES



Notes: Average yields are net of taxes, fees, and passenger facility charges and exclude fees charged by the airlines for optional services.
Shaded areas indicate economic recession during all or part of year.

Source: U.S. Department of Transportation, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100, accessed April 2021.

Airline Consolidation and Alliances

In response to competitive pressures, the U.S. airline industry has consolidated. Among the significant mergers and combinations were:

- In April 2001, American completed an acquisition of failing Trans World Airlines
- In September 2005, US Airways and America West Airlines merged
- In October 2009, Republic Airways Holdings completed purchases of Frontier and Midwest airlines
- In December 2009, Delta and Northwest merged
- In October 2010, United and Continental completed a merger
- In May 2011, Southwest completed its acquisition of AirTran, and integrated operations in 2014
- In December 2013, American and US Airways completed their merger and have maintained all hubs in the combined system
- In December 2016, Alaska Air Group, parent of Alaska Airlines, and Virgin America Airlines completed their merger. The merged airline received a single operating certificate from the FAA in January 2018, moved to a single reservations system and rebranded as Alaska Airlines on April 25, 2018, and retired the Virgin America brand in June 2019.

Consolidation has resulted in four airlines (American, Delta, Southwest, and United) accounting for approximately 80% of domestic seat-mile capacity and is expected by airline industry analysts to contribute to industry profitability. However, any resumption of financial losses could cause U.S. airlines to seek bankruptcy protection or liquidate. The liquidation of any of the large network airlines would drastically affect airline service at certain connecting hub airports, present business opportunities for the remaining airlines, and change airline travel patterns nationwide. As a primarily O&D airport, it is expected that in the unlikely event any of the large network carriers liquidated, the air service provided by such airline at PIT would be eventually replaced by another airline.

Alliances, joint ventures, and other marketing arrangements provide airlines with many of the advantages of mergers. Alliances typically involve marketing, code sharing, and scheduling arrangements to facilitate the transfer of passengers between the airlines. Joint ventures involve even closer cooperation and the sharing of costs and revenues on designated routes. Most of the largest U.S. airlines are members of such alliances with foreign-flag airlines.

Availability and Price of Aviation Fuel

The price of aviation fuel is a critical and uncertain factor affecting airline operating economics. Figure 17 shows the historical fluctuation in fuel prices caused by the many factors influencing the global demand for and supply of oil.

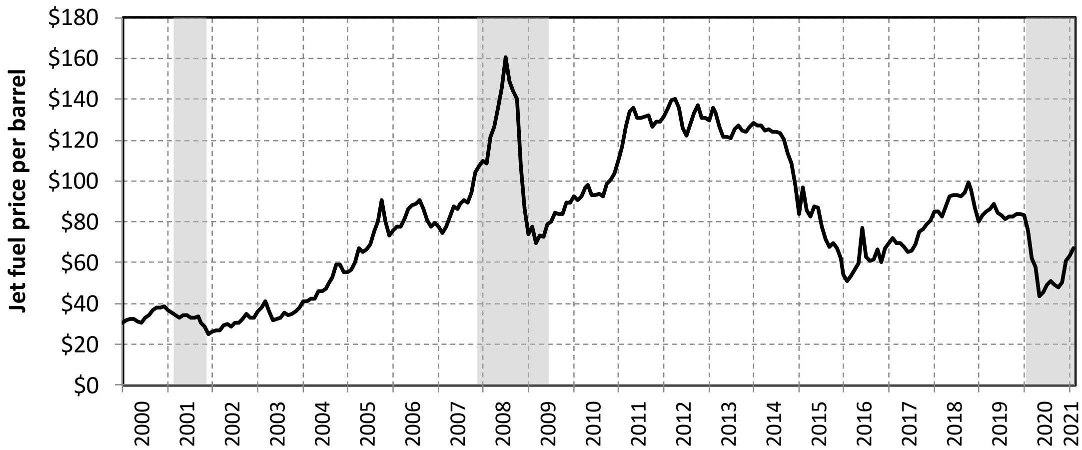
Between early 2011 and mid-2014, fuel prices were relatively stable, partly because of increased oil supply from U.S. domestic production made possible by the hydraulic fracturing of oil-bearing shale deposits and other advances in extraction technologies. As of mid-2014, average fuel prices were approximately three times those at the end of 2003 and accounted for between 30% and 40% of expenses for most airlines.

Beginning in mid-2014, an imbalance between worldwide supply and demand resulted in a precipitous decline in the price of oil and aviation fuel through the end of 2015. Fuel prices have since increased but dropped sharply in 2020 during the COVID-19 pandemic. The average price of aviation fuel in 2020 was almost 30% lower than it was in 2019 and was at the lowest point since early 2004. Between December 2020 and January 2021, aviation fuel prices increased 6%, but remained lower than prices in January 2019 and 2020, according to the U.S. Bureau of Transportation Statistics. Lower fuel prices have a positive effect on airline profitability as well as far-reaching implications for the global economy.

Airline industry analysts hold differing views on how oil and aviation fuel prices may change in the near term, although, absent unforeseen disruptions, prices are expected to remain stable. There is widespread agreement that fuel prices are likely to increase over the long term as global energy demand increases in the face of finite oil supplies that are becoming more expensive to extract. Some economists predict that the development of renewable sources of energy, pressures to combat global climate change, the widespread use of electric cars, and other trends will eventually result in a decline in the demand for oil and resulting downward pressure on fuel prices in the long term.

Aviation fuel prices will continue to affect airfares, passenger numbers, airline profitability, and the ability of airlines to provide service. Airline operating economics will also be affected as regulatory costs are imposed on the airline industry as part of efforts to reduce aircraft emissions contributing to global climate change.

Figure 17
HISTORICAL AVIATION FUEL PRICES



Notes: Data shown are monthly averages and were converted from gallons to barrels.

Source: U.S. Department of Transportation, Bureau of Transportation Statistics, Airline Fuel Cost and Consumption, F41 Schedule P12A, www.transtats.gov, accessed April 2021.

Aviation Safety, Security Concerns, and Other Extraordinary Events

Concerns about the safety of airline travel and the effectiveness of security precautions influence passenger travel behavior and airline travel demand. Anxieties about the safety of flying and the inconveniences and delays associated with security screening procedures lead to both the avoidance of travel and the switching from air to surface modes of transportation for short trips.

Safety concerns in the aftermath of the September 2001 attacks were largely responsible for the steep decline in airline travel nationwide in 2002. Since 2001, government agencies, airlines, and airport operators have upgraded security measures to guard against changing threats and maintain confidence in the safety of airline travel. These measures include strengthened aircraft cockpit doors, changed flight crew procedures, increased presence of armed sky marshals, federalization of airport security functions under the Transportation Security Administration (TSA), more effective dissemination of information about threats, more intensive screening of passengers and baggage, and deployment of new screening technologies. The TSA has introduced “pre-check” service to expedite the screening of passengers who have submitted to background checks.

Following the fatal crashes of B-737 MAX aircraft that are suspected to have been caused by the malfunction of the aircraft’s automated flight control system, all B-737 MAX aircraft were grounded by the FAA in March 2019. Among North American airlines that had B-737 MAX in service, Air Canada, American, Southwest, and United were affected. At the time of the grounding, B-737 MAX aircraft accounted for approximately 1.5% of U.S. airline seat capacity and less than 1.0% of seat capacity at the Airport. In November 2020, the FAA rescinded its order grounding the aircraft, allowing it to return to service once design changes and revisions to pilot training programs are approved and the aircraft is recertified by the FAA and other regulatory agencies. The Boeing 737 MAX aircraft returned to providing passenger service on December 29, 2020. However, on April 7, 2021, Boeing notified the FAA and operators of certain Boeing 737 MAX airplanes that it is recommending the operators temporarily remove them from service to address a manufacturing issue that could affect the operation of a backup power control unit. All U.S. airlines operating the 737 MAX (affecting 71 aircraft) took their aircraft out of service pending repairs, but subsequently returned these to service.

Historically, airline travel demand has recovered after temporary decreases stemming from terrorist attacks or threats, hijackings, aircraft crashes, and other aviation safety concerns. Provided that precautions by government agencies, airlines, and airport operators serve to maintain confidence in the safety of commercial aviation without imposing unacceptable inconveniences for airline travelers, future demand for airline travel at the Airport will depend primarily on economic, not safety or security, factors.

Capacity of the National Air Traffic Control System

Demands on the national air traffic control system have, in the past, caused delays and operational restrictions affecting airline schedules and passenger traffic. The FAA is gradually implementing its Next Generation Air Transport System (NextGen) air traffic management programs to modernize and automate the guidance and communications equipment of the air traffic control system and enhance the use of airspace and runways through improved air navigation aids and procedures. Since 2007, airline traffic delays nationwide have decreased because of reduced numbers of aircraft operations (down approximately 15% between 2007 and 2018), but, as airline travel increases in the future, flight delays and restrictions can be expected.

Capacity of the Airport

In addition to any future constraints that may be imposed by the capacity of the national air traffic control and national airport systems, future growth in airline traffic at the Airport will depend on the provision of capacity to accommodate aircraft flights and passengers. The forecasts presented later in this section were based on the assumption that neither available airfield capacity nor demand management initiatives will constrain traffic growth at the Airport. Furthermore, it is assumed that the projected increases in enplaned passengers can be accommodated by existing terminal capacity in conjunction with the capital improvements, including the TMP, planned through the end of the projection period.

PASSENGER TRAFFIC RECOVERY SCENARIOS

In the long term, airline traffic at the Airport can be expected to be largely determined by the demographics and economy of the Airport service region and the other key factors just discussed. In the near term, these factors will be overshadowed by the question of how long it will be before control of the pandemic and the resumption of economic growth allows airline traffic to recover to pre-pandemic levels.

This report does not present forecasts of airline passenger traffic at the Airport based on analyses of the economic basis for airline traffic at the Airport, trends in historical airline traffic, changes in airline service, forecasts of economic growth, and other key factors that will affect future traffic. Rather, the report adopts two scenarios for the recovery of passenger traffic over the next several years – a base case and a slow recovery scenario. As shown in Table 12 and Figure 18, a recovery in passenger traffic to 2019 levels is assumed to occur in 2024 in the base case and in 2028 in the slow recovery scenario.

The two scenarios reflect a range of potential passenger traffic. Each scenario is based on two underlying assumptions:

- Domestic traffic will recover more quickly than international traffic due to continued restrictions on non-essential travel, quarantine requirements at most destinations outside of the United States, and COVID-19 test requirements for all airline passengers entering the United States.

- Business travel will lag the growth in leisure travel due to extended corporate restrictions on travel and work-from-home policies as well as pent up demand for vacation travel related to prolonged shelter-at-home requirements.

The development of the base case and slower growth scenarios was informed by guidance from industry analysts, including Fitch Ratings, Moody's Investor Service, S&P Global Ratings, and Airlines for America (A4A). The base case projection follows the mid-point of A4A's "optimistic" and "pessimistic" projections as published on June 11, 2021.* Assumptions specific to each scenario are described below:

- **Base case scenario** reflects a continued rollout and acceptance of the vaccine in the United States compared with slower global progress, a decreasing number of new COVID cases with intermittent surges related to new virus variants, the increasing potential for achieving herd immunity in late 2021 to 2022, increased consumer confidence in air travel, particularly by leisure travelers, and gradually decreasing unemployment rates.

- **Slow scenario** reflects a slower recovery and slower growth than the base case, including a slower than expected rollout and acceptance of the vaccine in the United States and the world, reluctance of the public to get the vaccine, and a higher than expected number of new COVID cases caused by virus variants.

For both scenarios during the COVID-19 recovery period, it was assumed that:

- COVID-19 will continue to linger and booster vaccines and/or those designed for variants will be developed and available for U.S. distribution.

- Protective measures such as social distancing, use of face masks, and travel restrictions to certain areas will remain in effect as needed to limit the further spread of COVID-19.

- Airlines and airports will continue to promote policies to maximize safety and public health. thereby increasing consumer confidence.

- Restrictions on air travel by U.S. citizens to foreign destinations will gradually be removed.

- The U.S. economy will gradually recover as outlined under the discussion in the "Economic Outlook" section.

However, the more contagious Delta variant is causing increasing concern, and its impact on the recent uptrends, if any, is not known at this time. On July 22, the Centers for Disease Control and Prevention reported that this variant now accounts for over 80% of new cases in the U.S. Therefore, it is not known to what degree, if any, it will bring about further restrictions or economic dislocation.

In the long-term, after 2019 passenger traffic levels are reached and effective preventative measures for COVID-19 are in place, it was assumed that:

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* Tracking the Impacts of COVID-19, Airlines for America, June 11, 2021.

- The economy of the Pittsburgh MSA will increase at a rate comparable to that of the State and nation as a whole.
- The U.S. economy will experience sustained GDP growth averaging approximately 2.0% per year, as noted in the previous section "Economic Outlook".
- The Airport will continue to be primarily an origin-destination airport.
- Commercial passenger airline service provided at airports in the region surrounding the Airport will increase at rates similar to or less than PIT and will not change significantly from the existing service profile.
- The airlines serving the Airport will continue to be diverse, including low cost carriers, network airlines, and foreign-flag carriers, and provide sufficient capacity to support passenger traffic growth at the Airport.
- There will be no major disruption of airline service or airline travel behavior as a result of airline bankruptcies or liquidations, international hostilities, terrorist acts or threats, or public health crises.
- Aviation fuel prices will remain at relatively low levels in 2021 and thereafter increase at moderate rates but remain below the record prices reached in mid-2008, reflecting reduced consumption levels, technological advances, and the availability of previously unexplored resources.
- Airlines will continue to invest in and research sustainable aviation fuel (SAF) and gradually introduce SAF into their operations to address climate change.

Projection for 2021

The 2021 projection in each scenario was based on actual aviation activity for the first 6 months of 2021 (January through June) and assumptions for the remaining 6 months of 2021, as summarized below.

- **Actual Aviation Activity.** During the first 6 months of 2021, total enplaned passengers increased 17.6%, including a 32.2% increase in LCC passengers, a 3.4% decrease in mainline airline passengers, and a 21.2% increase in regional airline passengers. Total landed weight for the Airport decreased 6.8%, including a 12.4% decrease in passenger airline landed weight offset by a 33.5% increase in all-cargo airline landed weight.
- **Projections for the Remaining Months of 2021.** For the remaining 6 months of 2021 (June through December), it was assumed that:
    - Available departing seats will gradually increase month over month, but at lower levels than published OAG schedules.
    - Load factors will increase gradually but remain below historical levels.
    - Airlines that remain in operation but temporarily discontinued service at the Airport in 2020 in response to the pandemic and international travel restrictions (largely foreign-flag airlines) will restart service in 2021 in both scenarios.
    - Airlines will begin to add back capacity for the summer peak season in 2021.

Projections for 2022 through 2028

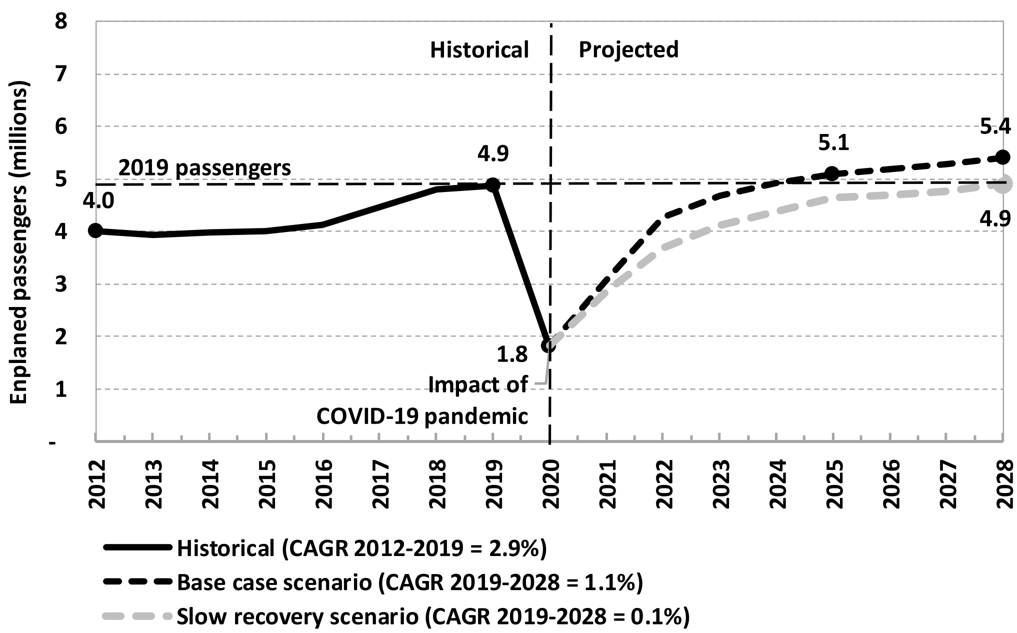
Table 12 presents projections of enplaned passengers, landed weight, load factor, and average seats per departure for the base case and slow recovery scenarios in 2022 through 2028.

Enplaned Passengers. As noted previously, the recovery of passenger traffic to 2019 levels occurs in 2024 in the base case and in 2028 in the slow recovery scenario. As shown in Table 12 and on Figure 18, total enplaned passengers at PIT are projected to increase to 5.4 million in 2028 in the base case, compared with 4.9 million in the slow recovery scenario.

Landed Weight. As shown in Table 12, total landed weight at PIT is projected to increase to 7.1 million thousand-pound units in 2028 in the base case, compared with 6.4 million thousand-pound units in the slow recovery scenario.

Figure 18
SCENARIOS FOR ENPLANED PASSENGERS
Pittsburgh International Airport

This projection was prepared on the basis of the information and assumptions given in the text. The achievement of any projection is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the projection, and the variance could be material.



Note: CAGR = Compound annual growth rate

Sources: Historical— Allegheny County Airport Authority records.
Projection—LeighFisher, July 2021.

Table 12
AVIATION ACTIVITY RECOVERY SCENARIOS
Pittsburgh International Airport

This projection was prepared on the basis of the information and assumptions given in the text. The achievement of any projection is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the projection, and the variance could be material.

	Historical		Projected								CAGR 2019-2028
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	
Enplaned passengers (thousands)											
Historical	4,875	1,812									
Base case scenario			3,070	4,266	4,680	4,924	5,086	5,188	5,292	5,397	1.1%
Slow scenario			2,849	3,689	4,112	4,369	4,631	4,701	4,771	4,899	0.1%
Percent of 2019 enplaned passengers											
Base case scenario			63%	88%	96%	101%	104%	106%	109%	111%	
Slow scenario			58%	76%	84%	90%	95%	96%	98%	101%	
Landed weight (thousands of 1,000-pound units) *(a)*											
Historical	6,263	3,703									
Base case scenario			4,442	5,670	6,165	6,461	6,661	6,791	6,923	7,058	1.3%
Slow scenario			4,171	4,996	5,500	5,811	6,129	6,221	6,314	6,409	0.3%
Load factor (percent of seats occupied)											
Historical	81.1%	51.0%									
Base case scenario			64.2%	69.0%	74.4%	79.9%	82.3%	82.3%	82.4%	82.5%	0.2%
Slows scenario			64.2%	68.5%	73.5%	78.4%	80.9%	80.9%	81.0%	81.1%	0.0%
Average seats per departure											
Historical	99.3	102.5									
Base case scenario			100.8	101.7	102.3	102.5	103.2	104.0	104.7	105.5	0.7%
Slow scenario			100.1	100.3	100.5	100.7	101.0	101.6	102.5	103.4	0.4%

Note: Includes scheduled passengers only. Totals may not add due to rounding. CAGR = Compound annual growth rate

(a) Reflects the additions of cargo service added in 2021.

Sources: Historical: Allegheny County Airport Authority records.
Projection: LeighFisher, July 2021.

FINANCIAL ANALYSIS

FRAMEWORK FOR FINANCIAL OPERATIONS

The Authority was created by the County of Allegheny (the County) on June 17, 1999 as a body corporate and politic under the Municipality Authorities Act of the Commonwealth of Pennsylvania (the Act). The Airport is owned by the County and is operated by the Authority under the Operation, Management, and Transfer Agreement and Lease (Transfer Agreement). The Authority's original Articles of Incorporation provided that the term of existence of the Authority extends to July 14, 2049; however, in June 2021, the County extended the term of the Authority through June 2059. In connection with the transfer, the Authority assumed the obligations of the County for airport revenue bonds previously issued by the County to finance construction and development of the Airport System, all of which were defeased in 2019.

In connection with the Transfer, the County also transferred to the Authority its right, title and interest in all licenses, permits, approvals, awards or decisions related to the Airport System, including grant agreements, the right to receive any amounts payable to the County in connection with the Airport System (including without limitation the Revenues) and all benefits of contracts and agreements. The Authority also assumed all of the County's obligations and liabilities pertaining to the Airport System. Pursuant to the Transfer, the Authority assumed the County's obligations in connection with various series of bonds issued by the County, all of which have since been repaid.

The Airport and Allegheny County Airport are defined as the Airport System under the Indenture.

Unless otherwise defined herein, all capitalized terms in this report are used as defined in the Master Indenture, the Airline Operating Agreement, or the preliminary official statement related to the 2021 Bonds.

Master Trust Indenture

The Master Indenture provides the conditions and associated covenants for the issuance of Bonds and also permits the issuance of Subordinate Obligations. The 2021 Bonds will be the first series of senior lien Bonds issued by the Authority pursuant to the Master Trust Indenture under which The Bank of New York Mellon Trust Company, N.A., serves as Trustee. The first series of Bonds pertain to the subordinate lien PNC LOC.

Revenues are generally defined as all income and revenues received by the Authority from the operation of the Airport System. Revenues do not include, among other things gifts or grants (including Federal COVID-19 Grants), PFC revenues, Customer Facility Charges (CFCs), Gaming Revenues, Natural Gas Revenues, and rents or other payments of any nature received now or in the future attributable to any ground leases, facility leases, or other developments which are identified as N91 unless as designated as Other Pledged Revenues.

PFCs Available for Debt Service are the amounts generated from PFC revenues that are designated by the Authority to be used to pay Debt Service accruing during an applicable period for Bonds issued to finance PFC-eligible project costs and may be used to reduce the Debt Service calculation in both the Rate Covenant compliance and Additional Bonds Test.

Other Pledged Revenues are moneys that are designated by the Authority pursuant to Section 4.18 of the Master Indenture as Revenues and may include, but are not limited to, moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 of the Master Indenture, and a portion of gifts and grants (including Federal COVID-19 Grants), Customer Facility Charges, Gaming Revenues, and

Natural Gas Revenues as declared by the Authority as Other Pledged Revenues. However, PFCs Available for Debt Service may not be designated as or considered Other Pledged Revenues. At this time, there is no rate stabilization funding provision in the new AOA; therefore, there is no expectation to make any deposits to this fund through the term of the AOA.

Operation and Maintenance Expenses (O&M Expenses) consist of the Authority's expenses for operation, maintenance, repairs, ordinary replacement, and ordinary reconstruction of the Airport System but do not include any capital cost or any allowance for depreciation or any operation or maintenance costs for Special Facilities.

Rate Covenant. In Section 5.04 of the Master Indenture (the Rate Covenant), the Authority covenants that it will fix, prescribe, and collect fees and other charges for the use of the Airport so as to produce:

1. Net Revenues (which include Other Pledged Revenues) equal to at least 100% of the amounts required to (a) pay Annual Debt Service on any Outstanding Bonds, (b) make the required deposits to the Common Debt Service Reserve Account or any Series Debt Service Reserve Account, (c) reimburse amounts owed to any Credit Provider or Liquidity Provider, (d) pay the interest on and principal of any indebtedness of the Authority during such Fiscal Year, other than for Outstanding Bonds, but including Subordinate Obligations, and (e) fund any debt service reserve funds created in connection with any indebtedness of the Authority other than Outstanding Bonds, but including Subordinate Obligations; and

2. Net Revenues and any amounts available in the Coverage Account,* in an amount at least equal to (a) 1.25 times the Annual Debt Service on Outstanding Bonds for each Fiscal Year and 100% of the annual debt service with respect to all outstanding Subordinate Obligations.

For purposes of demonstrating compliance with the Rate Covenant and the Additional Bonds Test, Debt Service is reduced by the amount of principal and/or interest paid with Capitalized Interest, and PFCs Available for Debt Service, if any, as defined in the Master Indenture. CFC revenues equal to annual debt service due on CFC-supported Bonds will be designated as Other Pledged Revenues and deposited to the Revenue Fund. In addition, Federal COVID-19 Grants received by the Authority to reimburse O&M Expenses will be designated as Other Pledged Revenues.

Flow of Funds. In Section 4.03 of the Master Indenture, the Authority covenants that all Revenues will be deposited into the Revenue Fund and, from the Revenue Fund, deposited into the various funds and accounts and in order of priority as illustrated in Figure 19. After all deposits that are required to be made into each of the Operation and Maintenance Fund, the Debt Service Funds, the Common Debt Service Reserve Account and series Debt Service Reserve Accounts, Subordinate Obligation Debt Service Funds, Subordinate Obligation Reserve Account, O&M Reserve Account, Renewal & Replacement Fund, Equipment and Capital Outlay Fund, Coverage Account, Rate Stabilization Fund, any remaining Revenues may be deposited into the Airport System Capital Fund.

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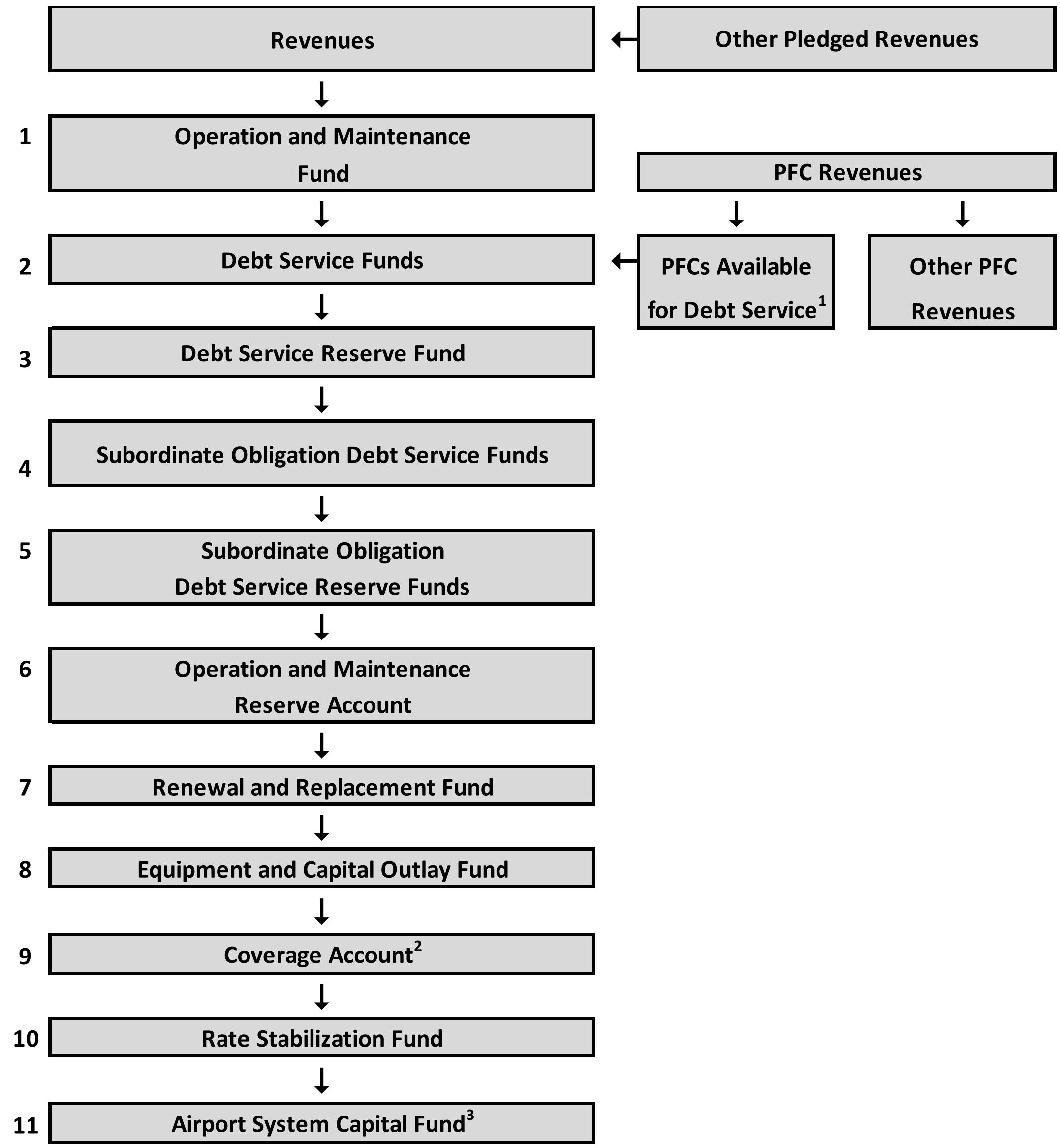
*The amount in the Coverage Account, which may be counted for purposes of the Rate Covenant or Additional Bonds Test, cannot exceed 25% of Annual Debt Service on the Outstanding Bonds in such Fiscal Year.

Figure 19

FLOW OF FUNDS UNDER THE MASTER INDENTURE

Allegheny County Aviation Department



1. Only PFC Revenues eligible and designated to pay debt service.
2. An amount not to exceed 25% of annual Debt Service.
3. Can be used for any lawful purpose. At the Authority’s discretion, such amounts maybe deposited into the Revenue Fund.

Source: Master Indenture.

Additional Bonds Test. Under Section 2.11 of the Master Indenture, certain conditions must be met before Additional Bonds may be issued to pay the Cost of Projects (the Additional Bonds Test). These conditions require, among other things, that estimates of Net Revenues together with funds available in the Coverage Account and any other legally available funds of the Authority plus Other Pledged Revenues shall equal at least 1.25 times Aggregate Annual Debt Service on (1) Outstanding Bonds, (2) the Additional Bonds, and (3) any future Series of Bonds which the Authority estimates will be required to complete payment of the estimated costs of construction of uncompleted portions of Airport Facilities, and (4) 100% of the annual debt service for each such Fiscal Year with respect to all outstanding Subordinate Obligations. The estimates of Net Revenues must satisfy these obligations for the later of (1) the fifth full Fiscal Year following the issuance of the proposed Bonds or (2) the third full Fiscal Year during which no interest on the proposed Bonds is expected to be paid from the proceeds. This provision of the Master Indenture is referred to as the Additional Bonds Test.

Subordinate Obligations

The Master Indenture permits the Authority to issue Subordinate Obligations secured by liens on the Authority's Revenues remaining after the deposits to the O&M Fund, Debt Service Funds, and Debt Service Reserve Fund that are subordinate to the liens provided to holders of the Authority's other Bonds, including the 2021 Bonds.

PNC Bank provided a revolving line of credit to the Authority in the maximum principal amount of $150 million (the PNC Line of Credit). Proceeds of the PNC Line of Credit have been used to provide interim funding for costs of the TMP. The PNC Line of Credit is secured under the Master Indenture by a subordinate lien on Net Revenues. A portion of the proceeds of the 2021 Bonds will be applied to the repayment of all or a portion of the outstanding balance of the PNC Line of Credit as of the date of issuance and delivery of the 2021 Bonds. Thereafter, the PNC Line of Credit will remain available to the Authority to finance costs of the TMP and for any other available legal use through its maturity date of December 16, 2022.

Other Debt

The Authority incurred $6 million in indebtedness that is not secured by the pledge of Net Revenues under the Master Indenture under a BIOS loan from the Commonwealth Finance Authority. The proceeds of the BIOS loan are being used for the development of infrastructure and related improvements for the approximately 195-acre N91 site. The BIOS loan is secured only by an Assignment of Rents and Leases from the site to be improved, which revenues are not part of Revenues under the Master Indenture. The Authority plans to request an additional $3 million BIOS loan for other infrastructure improvements in N91.

Passenger Facility Charge Program

PFCs are fees imposed on enplaned passengers by airport sponsors to generate revenues for eligible airport projects that increase capacity, enhance competition among and between air carriers, enhance safety or security, or mitigate noise impacts. PFCs were authorized by Title 49 U.S.C. §40117. Airport sponsors are authorized to collect PFCs in the amount up to $4.50 per enplaning passenger.

As shown in Table 13, the Authority has received approvals from the FAA under seven applications to collect and use PFCs for a total of $566 million in collection authority at the $4.50 level, including approval at the $4.50 level in December 2019 for $62 million in PFC authorization to pay for $28 million in PFC-eligible terminal and roadway design costs and $34 million in associated financing costs. In the second half of 2021, the Authority intends to submit a new PFC application to collect and use PFCs for the eligible construction and financing costs of the TMP. It is estimated that approximately

$537 million of the project costs for the TMP are PFC-eligible, which exceeds the Airport's PFC financing capacity. A PFC of $4.50 per passenger is projected to support $345 million in TMP project costs, consisting of $70 million in PFC pay-as-you-go (paygo) funding and $275 million in bond-funded project costs.

The Authority's current PFC collection authority extends to December 1, 2034. It is expected that when new application for TMP construction is approved, the Authority's collection authority will extend through or beyond the term of the TMP bonds.

Existing and expected PFC approval is reflected in the financial projections presented in this report, including the authorization to use PFC revenues to pay a portion of the debt service attributable to the 2021 Bonds and Future Bonds as well as for pay-as-you-go PFC expenditures currently projected for the TMP under the planned subsequent PFC application described above.

Table 13

APPROVED PASSENGER FACILITY CHARGES

Pittsburgh International Airport

Through December 31, 2020

			Activity Through 12/31/2020	
Application Number	**Collection Level**	**Amount Approved for Collection/Use[1]**	**Collections[2]**	**Disbursements**
01-01-C-05-PIT (closed)	$4.50	$ 77,250,136	$ 74,248,853	$ 74,248,853
03-02-U-03-PIT (closed)	$4.50	Approval for use	-	-
04-03-U-02-PIT (closed)	$4.50	Approval for use	-	-
04-04-C-01-PIT (open)	$4.50	251,401,645	212,562,020	212,562,020
07-05-C-01-PIT (open)	$4.50	134,901,500	33,746,303	33,746,303
07-06-C-00-PIT (open)	$4.50	40,370,883	3,426,432	3,426,432
20-07-C-00-PIT (open)	$4.50	61,868,032	11,911,905	11,911,905
Total Authority		**$ 565,792,196**	**$ 335,895,514**	**$ 335,895,514**
Collections through 12/31/20		$ 338,471,189		
Interest Earnings		425,608		
Total Collections and Interest		$ 338,896,797		
Remaining Approved Collections		$ 226,895,399		

1. Includes all amendments as of December 31, 2020.
2. Consists of collections and interest earnings.

Source: Allegheny County Aviation Authority.

Airline Operating Agreement and Terminal Building Lease (AOA)

In late 2020, the Authority entered into a new AOA with passenger airlines relating to the use of the Airport, the rental of space, and the establishment of procedures for adjusting airline rentals, fees, and charges. The new AOA replaced an agreement that had been in place since 1988 and was scheduled to expire in May 2018 but was extended with modest revisions through the end of 2019. The effective date of the new AOA was retroactive to January 1, 2020 and initially extended through December 31, 2021, but was amended and extended through December 31, 2028, with an option to extend for an additional three years upon mutual agreement, through the end of 2031. The new AOA provides Signatory Airline approval for up to $1.43 billion in TMP project costs as well as $90 million for Airside Renovations. Amounts in excess of this would require Majority-In-Interest (MII) approval.* There are also certain procedures regarding project cost control set forth in the AOA pertaining to the TMP as described under the TMP Project Governance section.

As of the date of this report, the following airlines have signed the amended and extended AOA (the Signatory Airlines) – Alaska Airlines, American Airlines, Delta Air Lines, Southwest Airlines, Spirit Airlines, and United Airlines. These airlines and their affiliates accounted for 92% of the passenger market share at the Airport in 2020.

Each AOA is substantially identical except for provisions relating to the Leased Premises and assigned aircraft parking positions for each Signatory Airline. The Signatory Airlines collectively lease 22 of the 55 active gates with jetways on a preferential use basis. The remaining gates are available on a common use basis, of which six are Authority-controlled international gates. Similar to many "spoke" airports in a "hub and spoke" system, there are far more remain overnight (RON) aircraft parked than leased gates. For example, in August 2019, prior to the pandemic, approximately 51 aircraft were parked at contact gates overnight during weekdays.

The AOA provides for the rental of space and the use of certain facilities by the Signatory Airlines, the establishment of cost accounting centers, and the periodic adjustment of the rentals, fees, and charges to be paid by the Signatory Airlines as determined by the costs and expenses associated with the cost centers as defined in the agreements. The AOA also (1) grants certain rights and privileges to airlines, (2) provides for the timing and manner of required payments of rates and charges, and (3) sets forth other applicable operating conditions and requirements at the Airport.

Under the AOA, both Landing Fees and Terminal Rentals are each calculated according to "cost center residual cost" formulas, under which Non-Airline Revenues are credited against certain defined costs to determine the net cost to be paid by the Signatory Airlines in each cost center. The costs defined in the AOA include Operation and Maintenance Expenses, debt service, and other fund deposit requirements as required under the Indenture allocable to the respective Cost Centers, including the Coverage Requirement and O&M Reserve Requirement.

Signatory Airlines are also obligated to pay certain additional charges to recover costs associated with fit-outs to their ticket counters and aircraft parking (Ramp Fees). In addition, prior to DBO of the TMP, O&M Expenses, debt service, and certain rents related to the baggage systems are allocated amongst its users. Airlines also pay Facility Fees for the use of the common use gates, ticket counters, and associated facilities.

Also under the new AOA, the number of cost centers used to derive airline rates and charges have been significantly streamlined into Airfield, Terminal, and ACAA cost centers for PIT, plus Allegheny County Airport (AGC). Airline-supported cost centers are the Airfield and Terminal. The new Airfield Cost Center includes runways, taxiways, safety areas, infield areas, landing and navigational aids, airfield service roads, fencing, buffer areas, clear zones, fire and crash rescue support facilities, aircraft fuel farm and distribution system, hangar and field support areas, and military areas. The new Terminal Cost Center includes the passenger terminals, aircraft parking areas serving the terminal, roadways, and all associated ground transportation facilities (including parking and rental car facilities). The new ACAA Cost Center encompasses all other areas at PIT, which generally comprise

*Majority-in-Interest means Signatory Airlines representing greater than 50% in number, plus one additional Signatory Airline, and carrying greater than 50% of the total Enplaned Passengers at the Airport.

cargo and commercial development land and facilities. The first $600,000 per year (escalated with inflation) of surpluses or deficits from the AGC cost center will be credited to or included in the airline landing fee rate base. The remainder will be the responsibility of the Authority. AGC generated a surplus of $35,000 in 2018, broke even in 2019, and generated a surplus of $266,000 in 2020 in part due to an allocation of $158,000 in CARES grants.

Signatory Airline rentals, fees, and charges are calculated to ensure that the Airport System generates sufficient Airport System Revenues in the airline-supported cost centers to operate on a break-even basis after paying all Costs of such cost centers (as defined below) plus produce annual discretionary funding for Airport System capital improvements or other lawful purposes from (1) a required deposit to the Airport System Capital Fund and (2) a Concession Incentive Fee equal to 6% of nonairline concession revenues, including news and gifts, retail, food, beverage, parking, rental car, ground transportation (such as taxis, limousines, and transportation network companies), advertising, ground handling, fuel sales, and other permits or licenses, but excluding CFC Revenues. In addition, pre-DBO rates will fund the required increase in the amount to be on deposit in the Coverage Account prior to the opening of the TMP (the Coverage Requirement).

Certain aspects of the residual ratemaking methodology –will differ during the pre-DBO and post-DBO periods as follows:

1. The annual required deposit into the Airport System Capital Fund will equal $9.7 million per year (for both the Terminal and Airfield) commencing January 1, 2021, which will increase annually after 2021 by the greater of 3% or the change in the Consumer Price Index. This deposit requirement will be reset at $5 million per year in 2025 (the first full year after DBO), reflecting the opening of new facilities and the associated reduced repair and rehab of such facilities, which will increase annually after 2025 by the greater of 3% or the change in the Consumer Price Index.
2. Funding the incremental amount of the Coverage Requirement from pre-DBO terminal rentals net of amounts currently on deposit that total approximately $16.3 million.

Costs are defined as:

1. Operation and Maintenance Expenses (or O&M Expenses)
2. O&M Reserve Requirement (after giving effect to amounts on deposit in the O&M Reserve Account)
3. Aggregate Annual Debt Service (including the ACAA Loan)
4. Coverage Requirement (if any, after giving effect to amounts on deposit in a Coverage Account), equal to the amount necessary to produce or maintain an amount in the Coverage Account pursuant to the Master Indenture
5. Expensed Equipment and Capital Outlays for individual equipment purchases and capital outlays to maintain or rehabilitate the Airport with an amount equal to the sum of: (i) $3 million as increased by the CPI for each Fiscal Year beginning in 2021; and (ii) an amount equal to the direct charges for such Fiscal Year for any capital outlay or equipment purchase for the Airport System approved by a MII
6. Capital Projects to be expensed as provided in the agreement equal to any expenditure made to acquire, purchase or construct a single capital item or project for the purpose(s) of

improving, developing, preserving, or enhancing the Airport and having a net cost to Authority in excess of $1 million (as adjusted annually by the change in the CPI)

7. Fund Deposit Requirements, which are amounts necessary to deposit to accounts established in the Master Indenture to satisfy all requirements set forth in the Master Indenture

During the pre-DBO period:

1. A Debt Service Coverage surcharge requirement will be included in the rate base for Terminal Rentals over the twenty-four (24) months prior to the anticipated DBO to fund the Coverage Requirement in the amount necessary to meet the Coverage Requirement for the first full year after DBO, net of any amounts that may be on deposit with the Bond trustee or the Authority to satisfy the Coverage Requirement.

2. Debt service can be included in pre-DBO rates and charges if there is a delay in opening the TMP.

3. $24.7 million of Authority funds applied to defease all Bonds that were outstanding as of the date of the prior indenture defeasance (December 18, 2019 (the ACAA Loan) will be included in the Terminal Rent rate base to repay the Authority beginning in in Fiscal Year 2021 as determined on an annual basis by the Authority in a manner to try to stabilize rates.

Space is rented to the Signatory Airlines on an exclusive and preferential use basis subject to accommodation provisions, and for the post-DBO period the baggage handling facilities will be leased on a common use basis.

Prior to the start of each Fiscal Year, the Authority establishes rates to be in effect for the subsequent Fiscal Year. After the close of each Fiscal Year, there is an annual settlement, whereby the rates and charges are recalculated using audited financial statements to determine any airline under/over payment. If at any time during any Fiscal Year, the Authority's projections based upon its most recently available information with regard to Net Airfield Area Costs or Net Terminal Costs (as described above) actually incurred or realized during the Fiscal Year, together with the most recently available information with respect to landing fees or terminal rentals actually received by the Authority, indicate that such payments at the then-current rates would result in an overpayment or underpayment of five percent (5%) or more of the amount required to be generated by the Authority through such fees and charges during the Fiscal Year, then the Authority may adjust the respective rates for the remaining months of the Fiscal Year to conform to its current projection.

Cargo carriers can sign a separate airline operating agreement that provides similar rights and privileges, but the AOA establishes the signatory cargo landing fee rate to be equal to 110% of the Signatory Airline rate. Cargo operating agreements are under month-to-month holdover status.

Non-signatory passenger airlines and cargo carriers pay a rate equal to 120% of the Signatory Rate.

Ticket counters, ticket kiosks, airline ticket offices, holdrooms, and aircraft apron are leased on a preferential use basis. Prior to DBO, inbound and outbound baggage space and facilities are leased on an exclusive and joint use basis. After DBO, baggage handling systems and space will be leased on a common use basis. All other space (including bag service offices, operations areas, club lounges, etc.) is leased on an exclusive use basis. With the assistance of the Signatory Airlines and the Airline Technical Representative (ATR), space plans and leasehold premises for individual airlines were developed and included in the New AOA based on the TMP design as of the signature date. Such leased premises will be adjusted, if necessary, before DBO based on the final design and again after

DBO to reflect as-builts. All common use facilities (ticket counters, holdrooms, loading bridges, aircraft aprons, and remain overnight ("RON") positions) may be used by any airline on a common use basis subject to a per-turn fee or other activity basis.

A discussion regarding airline input into TMP Project Governance can be found below under the discussion of the TMP.

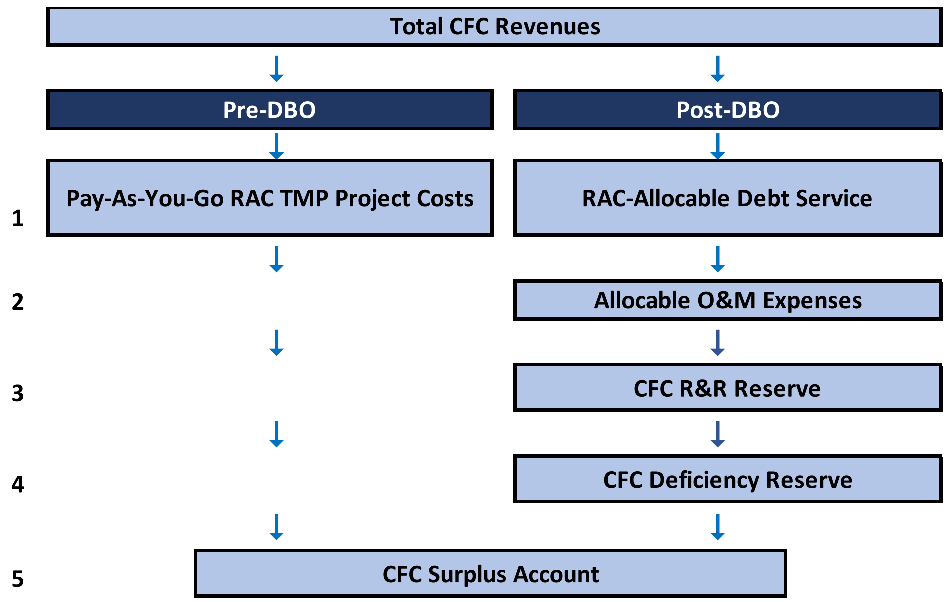
Customer Facility Charge Program

The Authority has levied a rental car CFC since March 1, 2011, which is assessed on all customers renting a vehicle from the Airport. The initial amount of $3.00 per rental car transaction day, not to exceed seven transaction days, was increased to $5.50 per day on November 1, 2018, and to $6.00 per day on February 1, 2020. In April 2020, the Authority raised the cap on the number of days of collection from 7 days to 30 days at the request of the rental car companies. CFCs may be used to pay, or reimburse the Authority for its direct and indirect costs and expenses of financing, designing, constructing, operating, and maintaining facilities utilized by rental companies, and facilities to be rehabilitated, modified, or improved to accommodate rental car-related facilities at the Airport, including capital costs and debt service associated with improvements to the rental car portion of the garage and related facilities, or for any rental car related purpose the Authority determines is a reasonable use of such funds.

Through 2016, CFC revenues were used for operating expenses, debt service, and depreciation of facilities and assets utilized in rental car operations net of amounts already being collected from the rental car operators. Beginning in 2017, CFCs Revenues were set aside to pay for the rental car-related costs associated with the TMP. CFCs will be used to pay for rental car-related TMP project costs on both a paygo and leveraged basis with the first use of CFCs to pay debt service on Bonds beginning at DBO. It is estimated that CFCs will fund approximately $61 million in paygo project costs and $54 million in Bond-funded project costs, or a total of $115 million. Beginning at DBO, CFC revenues in excess of allocable debt service will be used to pay the pro rata share of O&M Expenses, fund a CFC renewal and replacement reserve, and fund a CFC deficiency reserve up to one year's principal and interest. All remaining CFCs will be deposited into the CFC Surplus Account to be available to fund other allocable operating expense and capital improvements and/or retire debt.

As noted earlier, CFCs are not included in Revenues except to the extent designated by the Authority as Other Pledged Revenues. The flow of funds for CFCs is shown in Figure 20.

Figure 20
CFC FLOW OF FUNDS
Pittsburgh International Airport



Source: Allegheny County Airport Authority.

Gaming Revenues

The Authority is a designated funding recipient under the Pennsylvania Race Horse Development and Gaming Act adopted by the State in 2000 and amended in 2019 (the Gaming Act). The Gaming Act legalized slot machine parlors and table games in race tracks and standalone facilities. During the past five years, the Authority has received a total of $53.2 million in revenues from the State under the Gaming Act (Gaming Revenues). The Gaming Act provides that the Gaming Revenues can be used for debt service, development, and economic development of the Airport.

Under the amended Gating Act, $12.4 million per year is appropriated to the Authority by statute. There can be no assurance that the Gaming Act will not be amended in the future to reduce or eliminate payments of such revenues to the Authority. The Authority intends to use Gaming Revenues as a paygo source of development costs and economic development, including making a contribution to the costs to fund the TMP and, following completion of the TMP, to pledge a portion of its Gaming Revenues to pay debt service on the Bonds as Other Pledged Revenues.

In the past, the Authority has deposited a portion of the annual Gaming Revenues in the Revenue Fund as a credit to the airline rates and charges. The Authority currently expects to continue to do so in the future by designating a portion of annual Natural Gas Revenues as Other Pledged Revenues.

Natural Gas Revenues

On February 8, 2013, the Authority's Board awarded the bid to drill natural gas at the Airports to CNX Gas Company LLC (CNX). The Authority received an upfront payment of $46.1 million from CNX and will receive ongoing payments over the term of the lease which continues from year to year as drilling continues. In addition to ground rent, the authority earns ongoing royalties on the natural gas production. Net revenues from the natural gas lease have been used to reduce airline rates and charges and for capital expenditures, including economic development, at the Airport. During 2020 and 2019, drilling revenues of $5.6 million and $10.1 million, respectively, were received with $7.9 million allocated to fund various capital projects and $3.8 million allocated to reduce airline rates and charges.

Two pads and 14 wells have been completed at the Airport to date. While the Authority has received royalties on an ongoing basis under the Gas Lease, there can be no assurance that CNX will continue operations at the Airport, or that other companies active in the oil and gas business will be interested in obtaining rights at the Airport. Decisions regarding continued drilling, as well as the amount and frequency of royalties, are made based on market conditions relating to fluctuations in the price of oil, gas and other hydrocarbons on the open market and other various factors, and are not in the control of the Authority. Accordingly, there can be no assurance that the Authority will continue to receive royalties under the Gas Lease or that such royalties will remain at current annual levels.

In the past, the Authority has deposited a portion of the annual Natural Gas Revenues in the Revenue Fund as a credit to the airline rates and charges. The Authority currently expects to continue to do so in the future by designating a portion of annual Natural Gas Revenues as Other Pledged Revenues upon DBO.

For purposes of this report, it was assumed that Gaming Revenues and Natural Gas Revenues designated by the Authority as Other Pledged Revenues starting at DBO would total approximately $11 million per year. The Authority reserves the right to adjust such amounts (other than its share of the baggage system costs which are equal to the 10% fixed portion) on an annual basis. Per the residual nature of the AOA, any reduction in the amount of Gaming Revenues and Natural Gas Revenues designated as Other Pledged Revenues would correspondingly increase Signatory Airline rentals, fees, and charges to ensure that the Airport System generates sufficient Airport System Revenues to operate on a break-even basis.

Federal COVID-19 Grants

In March 2020, in response to the disruptive effects of the COVID-19 pandemic on economic activity and airline travel, the federal Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted. Among relief provided by the CARES Act is aid to airport operators as grants to offset the loss of revenues. The CARES Act provided an aggregate of approximately $10.0 billion of grants to airports, allocated by formula. The Authority was awarded $36.2 million of grants under this legislation and executed agreements for these grants.

CARES Act grants may be used for any purpose for which airport revenues may lawfully be used. The Authority executed its CARES grants for PIT and AGC and applied $10.5 million towards operating expenses in 2020, expects to refund $8.2 million in principal and interest to refund a portion of the PNC Line of Credit in 2021, and intends to use the balance to pay eligible operating expenses. In addition, Allegheny County provided $2 million of its CARES allocation to the Authority to pay for a portion of police services expenses in 2020. The Authority also received grants for 2020 under provisions of the CARES Act that increased the federal match to 100% for capital grants under the

Airports Improvement Program (AIP). Such additional AIP grant funds will be used as a source of funding for the CIP.

In December 2020, the federal Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSA Act) was enacted to provide additional economic relief. The CRRSA Act provided for an aggregate of approximately $2.0 billion in funds for airport operators to prevent, prepare for, and respond to the pandemic, including the provision of relief from rent and minimum annual guarantee (MAG) payments to eligible airport concessionaires. Approximately $1.75 billion of CRRSA Act grant funds was allocated by formula to primary commercial service airports. The Authority was awarded $10.6 million of grants under this legislation plus $1.0 million for concessionaire relief and executed agreements for these grants. The Authority expects to use its CRRSA grants to refund a portion of the principal and interest on the PNC LOC in 2021. The Authority submitted its CRRSA concession program to the FAA for approval.

The American Rescue Plan Act (ARPA), enacted in March 2021, provided additional economic assistance to airport operators to prevent, prepare for, and respond to the pandemic. ARPA grants are to be awarded to primary commercial service airports in the aggregate amount of approximately $6.5 billion, allocated by formula. An additional, $0.8 billion is to be available to provide relief from rent and MAG payments to the operators of eligible in-terminal concessions. The Authority was awarded $35.9 million of grants plus $4.0 million for concessionaire relief under this legislation and has submitted its grants to the FAA for approval. The Authority expects to use its ARPA grants to refund a portion of the principal and interest on the PNC LOC and pay eligible operating expenses. The Authority is in the process of developing its ARPA concession program for submission to the FAA for approval.

The Authority also expects to receive additional AIP grants in 2021 and 2022 under provisions of ARPA that extend the 100% federal match. Such additional AIP grant funds, whose amounts have not yet been determined, will be used as a source of funding for the CIP.

Table 14 presents a summary of ACAA's allocation of such grants excluding the amounts allocated for supplemental AIP project funding. In total, the Authority was allocated $82.7 million by the FAA (including $5.1 million for concession relief). In addition, Allegheny County provided $2 million of its CARES allocation to the Authority to pay for a portion of police services expenses in 2020.

Table 14
SUMMARY OF FEDERAL COVID-19 GRANTS
Allegheny County Airport Authority

Federal COVID-19 Relief Bill	PIT Total	Concessions Relief (max)	AGC	ACAA Total
CARES				
PIT		$ -	$ -	$ 36,066,209
AGC		-	157,000	157,000
Total	$ 36,066,209	$ -	$ 157,000	$ 36,223,209
CRRSA				
PIT		$ 1,010,033	$ -	$ 10,544,842
AGC		-	57,000	57,000
Total	$ 9,534,809	$ 1,010,033	$ 57,000	$ 10,601,842
ARPA				
PIT		$ 4,040,132		$ 35,722,313
AGC		-	148,000	148,000
Total	$ 31,682,181	$ 4,040,132	$ 148,000	$ 35,870,313
Total	$ 77,283,199	$ 5,050,165	$ 362,000	$ 82,695,364
Plus Allegheny County CARES (2020)	$ 2,000,000	$ -	$ -	$ 2,000,000
	$ 79,283,199	**$ 5,050,165**	**$ 362,000**	**$ 84,695,364**

Sources: Federal Aviation Administration for amounts allocated to the Authority and the Authority for the amount provided by Allegheny County.

The historical and projected uses of Federal COVID-19 Grants to reimburse operating expenses (currently projected to be applied from 2020 through 2024) are shown in Exhibit E as Other Pledged Revenues. The projected use of the CARES Act grant to paydown a portion of the PNC Line of Credit is shown in Exhibits E 1, E 2, and E 3.

RECONCILIATION OF HISTORICAL FINANCIAL RESULTS

The Authority accounts for the financial activities of the Airport System on the accrual basis of accounting according to generally accepted accounting principles (GAAP) for government entities.

Table 15 presents a summary and reconciliation of the historical operating results of the Airport System under both GAAP and accounting principles required by the prior indenture for 2018 through 2019 and for 2020 under the new Indenture, as obtained from Allegheny County Airport Authority Financial Statements as reported by the Authority's auditor.

Table 15
RECONCILIATION BETWEEN TWO BASIS OF ACCOUNTING
Allegheny County Airport Authority
For Fiscal Years ending December 31, 2018, 2019, and 2020

	Prior Indenture		New Indenture
	2018	2019	2020
Revenues			
Revenues per the Prior Indenture	$ 151,159,835	$ 145,003,528	$ 110,404,159
Less - Interest Income	(976,537)	(1,788,581)	(332,278)
PFC Revenue applied to debt service	(9,200,000)	-	-
CFC Revenue applied to debt service		-	-
Other revenue applied to debt service	(5,004,179)	(6,065,000)	-
Grants to offset operating costs			(13,091,912)
Incentivized revenue			531,719
Add - Revenue generated by the Excluded Cost Centers	3,617,146	3,430,427	
Other Revenue	3,487,621	3,982,121	3
Total operating revenue per the Financial Statement	$143,083,886	$144,562,495	$97,511,691
Expenditures			
O&M expenses per the applicable indenture	$ 109,026,876	$ 106,311,147	$ 104,385,587
Debt service requirements per the applicable indenture	17,095,608	15,589,570	-
Less - Debt service deposits	(16,685,833)	(15,160,890)	-
Fund deposit requirements	(409,775)	(428,680)	-
Add - Expenditures incurred by the Excluded Cost Centers	3,495,046	3,328,793	-
Add - Expenditures paid by Gaming Fund	3,799,833	-	1,338,552
Depreciation	55,786,882	56,981,022	60,417,786
Other	9,373,206	13,170,119	14,683,017
Total operating expenses per the Financial Statement	$181,481,843	$179,791,081	$180,824,942

Source: Allegheny County Airport Authority Financial Statements for 2018, 2019, and 2020.

TERMINAL MODERNIZATION PROGRAM

After a multiyear planning process, the Authority Board approved a master plan for PIT in 2017 to guide future development at the Airport. The master plan identified the need to right-size and modernize terminal facilities that had been designed in the late 1980s and early 1990s in close cooperation with US Airways – the then dominant carrier at PIT – to accommodate its connecting hub operation, which was subsequently discontinued. The existing terminal complex was therefore designed with the intent to handle high volumes of connecting traffic when it opened in 1992. The Airport no longer serves as a major hub, but instead traffic is comprised of approximately 98% origin-destination (O&D) passengers and is now served by a diverse mix of airlines.

As a result of the US Airways legacy hub, ACAA is left with terminal facilities that in some respects far exceed the current level of activity, and in other respects, are undersized for a busy O&D airport. For example, (1) space constraints in the existing terminal cause capacity issues in the security screening areas, (2) disparate baggage handling facilities and the half mile distance from the landside building to the gates result in inefficient utilization of space and inequitable processing times among airlines as well as additional costs for the airlines, and (3) the international arrivals facility was not designed to meet current federal processing flows requiring a high level of staffing and monitoring by security personnel and resulting in a poor customer experience. In addition, 29-year old building systems such as elevators, escalators, mechanical, electrical, and communications technology are reaching or past the end of their service lives.

Under the TMP, the existing passenger landside terminal will be replaced with a new landside terminal and associated facilities, adjacent to the existing airside terminal, including a multi-level roadway system and a Multi-Modal Complex (MMC) for public and employee parking and rental car ready/return spaces and customer check-in. The TMP was designed to balance airside and landside terminal operations and requirements to serve the current and future makeup of passenger demand and capacity of PIT. It will also (1) align evolving customer requirements with capacity using new technology, (2) expand, realign, and/or renovate congested terminal facilities in a cost-effective and operationally efficient manner, and (3) improve building system functionality for a terminal facility reaching the end of its useful life. The right-sizing and optimizing of all facility components is essential for future flexibility and environmental sustainability.

Initially, the Authority planned to start construction of the TMP in mid-2020, but due to the pandemic construction was put on hold while continuing to develop the design. During the year-long pause, the Authority instructed its designers to refine the TMP design and operational plans to include public health and safety features to address new concerns created by the pandemic. The expected date of beneficial occupancy of the new landside terminal and associated facilities is late 2024 or early 2025. The financial projections in this report assume a DBO of January 1, 2025.

Construction and operation of the new terminal and multi-modal complex has been designed to comply with the Leadership in Energy and Environmental Design (LEED) standards for building materials while also seeking to reduce use of energy and water, and minimize waste, as well as to reduce emission of pollutants. The terminal is on track to attain LEED Silver certification, the customer service building LEED certification, and the garage "Park-Smart" certification. Certification is attained at design and construction points. Formal LEED certifications are expected approximately one year after the facilities are built and documentation is submitted.

The new terminal building will be the first new terminal constructed in the post-COVID-19 era and as such has been designed with input from public health experts in light of the pandemic, including physical spacing, touchless technology, and HVAC building systems. The TMP design was also influenced by extensive collaboration and coordination over the past five years with the airlines and the ATR.

The TMP is currently estimated to cost $1.35 billion based upon approximately 95% design, including construction, design, project and construction management, contingencies, an Owner Controlled Insurance Program, and escalation. As of June 2021, the TMP budget contingency was $118 million, of which $96 million is Construction Contingency and $22 million is the Project Contingency. The Project Contingency represents the portion of the budgeted contingency that is not allocated to specific contracts and that may be applied to provide additional Construction Contingency, additional fit-out work, or renovations of existing terminal facilities and equipment. The Construction Contingency represents 10% of the budgeted cost of each contract for the TMP and may be applied for unanticipated costs of each contract. The Construction Contingency reflects the impact of bids for the structural steel components of the TMP that were received on May 5, 2021, which were $44 million over the $80 million budget. Domestic steel prices increased significantly in 2021 reflecting strong global demand and high international steel and iron ore prices as world economies recover from the pandemic. Three subsequent bids totaling $42 million came in $3 million under budget.

The major components of the TMP generally consist of the following:

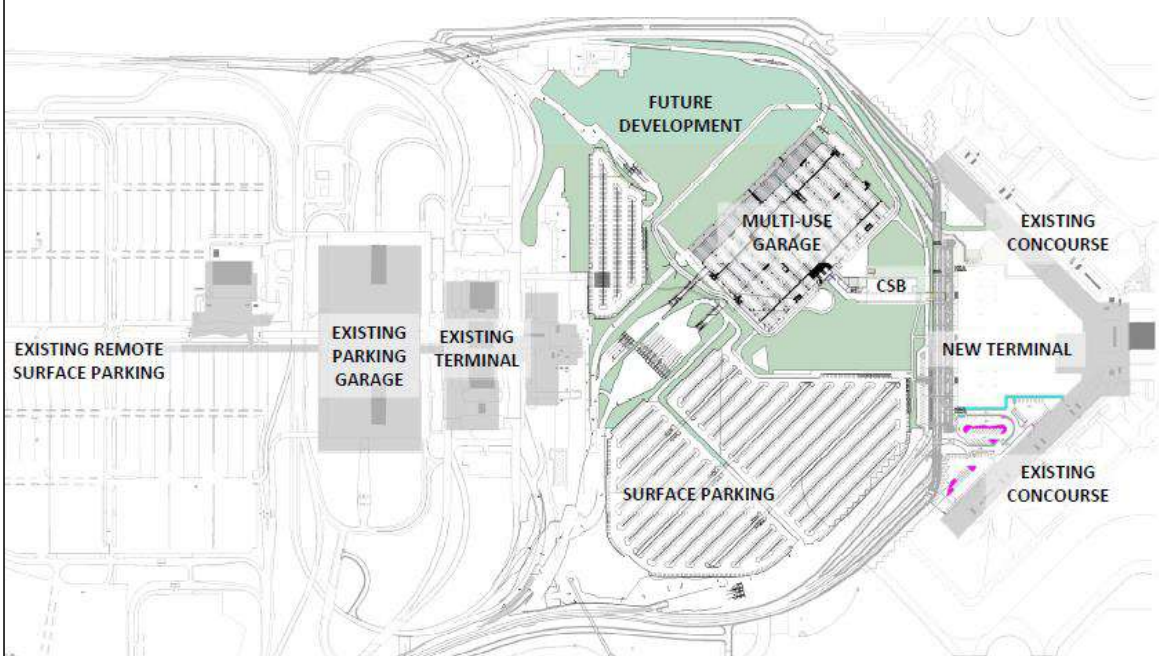
1. ***Site Development*** – clearing and grading of the site for the new landside terminal complex, constructing access roadways, and installing utilities to accommodate the new landside terminal complex and MMC, upgrading to the central utility plant to provide hot and chilled water and upgraded electrical service to the new terminal through new electrical switchgear; relocating fire and domestic pipelines, natural gas lines, fiber optic communications lines and electrical duct banks; site grading and drainage; fencing; and developing an exclusive-use TMP construction access road and temporary construction staging areas to separate construction traffic from the traveling public.
2. ***Terminal Roadways*** – modifying the existing airport roadway network to provide access to the new terminal, parking garage, surface parking, rental car center, and related airport facilities; constructing elevated roadways to provide vehicular access to the terminal's arrivals and departures levels; and constructing an at-grade roadway to provide commercial vehicular access.
3. ***Terminal Buildings*** – constructing a new replacement landside building comprising approximately 696,055 square feet along with curbside, ticketing lobby, TSA passenger security screening checkpoint, TSA in-line Checked Baggage Inspection System, curbside bag check, baggage claim areas, a connection to the airside terminal US Customs & Border Protection facilities (Federal Inspection Services), concessions, a covered commercial curb (for hotel, parking, and off-Airport shuttles as well as connection capabilities to public transportation), and associated public areas and support functions. This project component also includes modifying the existing airside building to create a seamless travel experience with the new landside terminal, including (1) decommissioning the existing automated people mover and baggage tunnels, (2) renovating 160,876 square feet of existing space to connect the two buildings for circulation and vertical conveyances, (3) reconfiguring the existing international arrivals facilities to meet current federal requirements and guidelines, (4) replacing Authority office space currently located in the existing landside terminal, and (5) upgrading various support space.
4. ***Baggage Handling System and Airline Equipment and Finishes*** – installing equipment to address air carrier operations in the landside terminal, including communications infrastructure, a common use system for certain ticket counters owned and maintained by the Authority, information display systems, common use inbound and outbound baggage handling systems, and applicable tenant finishes.
5. ***Parking and Ground Transportation Facilities*** – constructing an integrated MMC housing a multi-level parking structure, rental car facilities, and surface parking. The garage will accommodate approximately 3,300 public parking spaces (of which approximately 33 will have EV chargers) and will have access the landside terminal via a ground level covered pedestrian walkway and customer service building for rental car customers. The first level of the garage will be dedicated to rental car ready/return operations. A covered commercial curb at the terminal's ground level will provide curb access for hotel, parking, and off-Airport rental car shuttles and public transportation. Close-in public surface parking with approximately 2,750 parking spaces and approximately 850 employee parking spaces will be located within walking distance of the terminal. At this time, potential uses for the area behind the garage are still under consideration by the Authority, which could include additional surface parking, commercial development, and/or a rental car service area (to the extent the rental car companies fund or provide a backstop for any associated debt).

As shown on Figure 21, the new landside terminal will be located adjacent to and be connected directly to the existing airside terminal. The independent nature of the landside and airside terminals will allow for construction of the new landside terminal and other components of the TMP while still maintaining existing operations.

Airside Renovations and Airline Fit-outs. While discussing the scope, design, and budget for the TMP, the Authority and the airlines decided to advance the construction of certain renovations to the existing airside terminal to allow these improvements to be performed concurrently with the construction of the new landside terminal complex while contractors are mobilized and thereby reduce construction costs. The estimated cost of such improvements totals $90 million, which is in addition to the $1.35 billion for the TMP, and includes replacing existing pre-conditioned air systems for the gates; holdroom (gate area) renovations; restroom remodeling; mechanical, electrical, and plumbing upgrades; flooring upgrades; jetway preconditioned air system replacements; conveyance upgrades; flight information display screen upgrades; lighting panel retrofits; furniture floor outlets; the airside terminal's center core area renovations; skylight replacement; paging system upgrade; various IT improvements, and sewage piping and interceptor replacements.

In addition to advancing certain airside renovations, at the request of the airlines, the Authority agreed to also finance the cost of certain airline tenant finishes and fit-outs that will bring them to a move-in ready condition for preferential leased premises in the new terminal. The estimated cost of such improvements totals $14.9 million.

Figure 21
TERMINAL MODERNIZATION PROGRAM SITE DIAGRAM
Pittsburgh International Airport
(July 2021)



Source: TMP Team.

TMP Project Design and Management. The Authority has assembled program management and design teams with extensive experience and expertise in aviation capital projects and local construction conditions to collaborate on the delivery of the TMP (the TMP Team). Because the Authority has not executed a major capital program since the completion of the Midfield Terminal Project in 1992, and as a result, did not have adequate experienced staff and other internal capabilities to deliver the TMP. Consequently, it elected to engage a firm with knowledge and experience to help deliver the program successfully. The Paslay Management Group or PMG was selected to be the Authority's Program Director/Owner's Representative (Program Director or PD).

To support the Program Director, the Authority retained Jacobs as the Program Manager to provide the majority of staff support and expertise to assist the PD in program delivery and performance. The Program Manager provides program management and project support services, the development and implementation of program/project management plans, cost management and analysis, project and program scheduling, document control, bid packaging and award of contracts, configuration control - change management, invoice review and management, airport operations liaison; coordination of public outreach, coordination of website development, and administrative and management oversight of work by other consultants and contractors. Jacobs provides a full-time core team complemented with both part-time and full-time subject matter experts as needed for the Program Management Office (PMO).

In order to provide greater opportunities to Pittsburgh and Western Pennsylvania area design professionals and to enhance local and DBE firm participation opportunities, the Authority strategically decided to divide the Program into two distinct packages – Terminal and MMC. The joint venture of Gensler+HDR in association with luis vidal + architects were selected for the Terminal design and terminal roadways. Michael Baker International was selected to design the MMC (including roadway access and surface parking).

To manage the delivery of the construction elements of the TMP, the Authority procured two Construction Management (CM) teams, one for each of the Terminal and MMC packages. The CM teams are responsible for construction coordination and execution in collaboration with the PMO and act as an agent to the Authority. The CM teams will develop construction packages, establish project controls, and ensure construction elements are coordinated with interfacing work while adhering to the established budget, schedule, quality and safety parameters. PJ Dick/Hunt is providing construction management services for the new terminal and Turner Construction is providing construction management for the multi-modal complex. In addition, the Authority retained separate Quality Assurance Testing Services firms for the Terminal and MMC packages.

TMP Project Governance. In addition to the TMP Team, in order to mitigate construction risk and make informed decisions throughout TMP design and construction, the Authority created three internal committees to aid in obtaining support and approval of design and construction-related activities; monitor cost, budget, funding, contracts and changes; meet regulatory and statutory compliance standards; document reporting processes and generate information for decision-making; to demonstrate owner involvement in the day-to-day management of capital programs; and provide accountability and transparency. The three committees consist of an Executive Steering Committee, Finance Oversight Committee, and Construction Committee.

The Executive Steering Committee (1) provides program oversight and approval of scope, budget, schedule, and procurement and delivery methods, (2) aligns decision-making with strategic plans, (3) coordinates with Airport staff and other committees, (4) communicates with stakeholders and promotes community outreach efforts, and (5) makes recommendations for Board approvals. This committee consists of the Authority's Chief Executive Officer, Chief Financial Officer, Chief

Development Officer, and Senior Vice-President, Marketing and Communications (Ex-officio). In addition to the TMP, the Executive Steering Committee is also responsible for reviewing and revising as needed all capital programs for the Authority, including the annual Capital Improvement Program (CIP) as well as all master plans and strategic plans.

The Finance Oversight Committee was created to (1) align project scope with project funding to comply with applicable funding requirements, (2) review capital project budgets and costs, (3) evaluate project eligibility, (4) allocate funding sources and address funding overages and shortfalls, (5) coordinate actions with Construction Committee approvals, (6) advise others on funding issues, and (7) make recommendations for Board approval. This committee consists of Chief Financial Officer, Chief Development Officer, Vice President of Government and Community Affairs, ATR representative, and Vice President of Finance (Ex-officio).

The Construction Committee is responsible for (1) evaluating and approving bids, proposals, requests for reimbursements, contract awards and modifications for capital related costs of design and construction, (2) reviewing and approving change orders and back charges, (3) tracking MBE/DBE goals, (4) providing guidance, coordination and development of plans and procedures relating to capital programs, (5) reviewing and approving claims and settlements for design and construction, (6) providing close-out of capital projects, and (7) making recommendations for Board approval. This committee consists of the Chief Development Officer, Chief Financial Officer, Senior Vice President - Operations and Maintenance, Senior Vice President - Information Technology, Vice President of Business Development and Air Service, and the ATR representative.

As set forth in the new AOA, the ATR will continue to actively participate in the planning, design, and construction of the TMP to provide additional oversight of the construction of the TMP to the Signatory Airlines. The ATR will participate in all majority votes of the Construction and Finance Oversight Committees. The Authority must consider reasonable requests, suggestions, and recommendations of the ATR. If the total projected cost of the TMP is expected to exceed the "Estimated Project Cost" (defined as $1,427,517,500), the Authority must notify the chairperson of the PIT Airport Affairs Committee representing the Signatory Airlines. If the Authority funds any such increase in costs from sources that will not increase Airline Fees and Charges (including Other Authority Revenues, additional grants, PFCs, foundation support, or Authority pay-as-you-go contributions), Signatory Airline approval of the cost increase is not required. However, if the Authority proposes to include some or all of the cost increase in the Airline Fees and Charges, and the Authority and the Signatory Airlines cannot reach an agreement on a "Revised Project Cost" to replace the Estimated Project Cost, the Authority must conduct an MII vote among the Signatory Airlines to approve or reject the cost increase. If an MII disapproves of such cost increases, then the Signatory Airlines must collaborate with the Authority on an alternative course of action, which may include major design changes, changes in facility requirements, or a phased approach to construction.

TMP Project Delivery Method. The Authority evaluated a number of construction delivery strategies including, Design-Bid-Build, Design-Build, and CM at Risk. After evaluating these strategies and the requirements to obtain legislative action/special consideration at the State level to deviate from the State required Separations Act, the Authority decided to align with the Design-Bid-Build delivery method in accordance with the Pennsylvania Separations Act.

TMP Project Schedule. Design of the TMP commenced in September 2018, was 60% complete in March 2020 as of July 2021 was approximately 95% complete. Initial construction packages for the terminal are complete and ready to bid. Early site access has commenced. The Authority has received bids and awarded contracts for the acquisition of structural steel, foundation packages, and underground electrical and plumbing work for the TMP with construction starting in September.

Construction bids for TMP components representing approximately 83% of total project costs are expected to be awarded by the end of 2021. DBO is expected to occur in late 2024 or early 2025.

As noted earlier, the new landside terminal will be located adjacent to and be connected directly to the existing airside terminal. The independent nature of the current landside and airside terminals will allow for construction of the new landside terminal and other components of the TMP while still maintaining existing operations.

The Authority has strived to avoid or minimize environmental impacts and has obtained its General Permit from the Allegheny County Conservation District for the TMP. In addition, the Authority has paid into the Commonwealth's "in-lieu program" to compensate for unavoidable impacts. If environmental mitigation is required, the Authority will work with a "mitigation bank" to acquire any necessary mitigation credits for any necessary mitigation credits, e.g. purchasing a site approved by regulatory agencies containing wetlands and streams to offset unavoidable environmental impacts. The Authority also has in place procedures and plans for managing any suspect material should they be encountered during the construction of the TMP. The Authority has received a Finding of No Significant Impact by the Federal Aviation Administration (the "FAA") for the TMP Environmental Assessment, as well as approval of the environmental re-evaluation submitted to the FAA after some minor changes were made to the areas of impact associated with the program. The Authority continues to work with all regulatory agencies having jurisdiction over other permitting areas in order to minimize project-related impacts.

Once the new terminal is operational, alternative uses for the existing landside terminal and automated people mover will be pursued. If alternative uses are not realized, then the existing landside terminal will be demolished. The existing automated people mover and automated baggage system will be removed from service and abandoned in place. The Authority intends to retain the existing garage and surface parking lots for public or employee parking or for tenants of potential alternative uses. The Authority also plans to demolish the ends of A and B Concourses on the airside after DBO in accordance with the agreed upon project scope with the Signatory Airlines.

2021 - 2030 CAPITAL IMPROVEMENT PROGRAM

The Authority maintains an ongoing major maintenance and capital improvement program for the Airport System, which includes the TMP, airside renovations, and airline fit-outs. Each year the Authority develops a detailed Capital Plan for the ensuing Fiscal Year and a preliminary plan for capital projects for the five years thereafter. The Authority's 2021 Capital Budget and its 2021-2030 Capital Improvement Program (collectively the CIP) for the Airport System totals $2.1 billion (including the $1.35 billion budgeted for the TMP). Table 16 provides a summary of the projected expenditures by year and by funding source for the CIP, including amounts spent through 2020 on the TMP. The cost estimates were provided by the Authority and include all soft costs and pricing allowances.

In addition to the TMP, airside renovations, and airline fit-outs, the CIP identifies another $586 million for projects to maintain and enhance PIT and $79 million for Allegheny County Airport for a total of an additional $665 million. This includes annual funding for Equipment and Capital Outlays as defined in the AOA, which are expected to average approximately $3.4 million per year between 2021 and 2030.

Table 16

2021-2030 CAPITAL IMPROVEMENT PROGRAM EXPENDITURES AND FUNDING BY YEAR

Pittsburgh International and Allegheny County Airports

Allegheny County Airport Authority

	Total	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
CIP SPENDING BY YEAR												
PIT												
Terminal Modernization Program												
Terminal	$ 1,025,941	$ 94,766	$ 85,597	$ 229,791	$ 384,280	$ 231,507	$ -	$ -	$ -	$ -	$ -	$ -
Park/RAC	320,398	29,595	26,732	71,763	120,009	72,299	-	-	-	-	-	-
	1,346,339	124,362	112,328	301,554	504,289	303,806	-	-	-	-	-	-
Airside Renovations / Airline Fit-outs	104,932	-	-	47,219	47,219	10,493	-	-	-	-	-	-
Landing	344,463	-	10,238	18,320	33,750	37,500	30,520	12,400	136,334	20,000	26,900	18,500
Terminal - non-TMP	75,140	-	8,495	850	10,020	8,075	4,950	4,950	4,950	4,950	8,950	18,950
Ramp	1,250	-	1,250	-	-	-	-	-	-	-	-	-
Park/RAC - non-TMP	3,777	-	3,377	-	-	-	-	-	-	-	-	400
Roadways	500	-	-	-	-	-	-	-	-	-	-	500
Hangar and Field Support	15,840	-	240	3,600	-	-	-	-	-	10,500	800	700
CIA	46,135	-	8,533	9,064	6,900	8,750	12,888	-	-	-	-	-
Security	3,752	-	121	131	3,000	-	-	500	-	-	-	-
General Services	29,809	-	5,639	6,120	4,000	4,000	5,000	5,000	50	-	-	-
Cargo	64,099	-	9,003	32,563	18,163	4,369	-	-	-	-	-	-
ARFF	1,750	-	-	-	-	-	-	950	800	-	-	-
Admin	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal - PIT	$ 2,037,785	$ 124,362	$ 159,224	$ 419,423	$ 627,342	$ 376,993	$ 53,358	$ 23,800	$ 142,134	$ 35,450	$ 36,650	$ 39,050
AGC	79,108	-	2,681	12,350	11,455	10,580	11,090	10,450	7,074	6,128	4,300	3,000
Total CIP	$ 2,116,893	$ 124,362	$ 161,906	$ 431,773	$ 638,797	$ 387,573	$ 64,448	$ 34,250	$ 149,208	$ 41,578	$ 40,950	$ 42,050
SOURCES OF FUNDS	2,116,893	$ 124,362	$ 161,906	$ 431,773	$ 638,797	$ 387,573	$ 64,448	$ 34,250	$ 149,208	$ 41,578	$ 40,950	$ 42,050
Grants												
AIP - Entitlement	$ 45,891	$ -	$ 3,652	$ 4,454	$ 7,629	$ 1,773	$ 3,932	$ 1,000	$ 15,150	$ 4,150	$ 4,000	$ 150
Federal Discretionary	214,900	-	3,021	21,046	22,161	12,662	11,623	11,578	87,280	16,050	14,555	14,925
State - PennDOT	67,243	-	3,068	9,786	10,394	18,098	12,415	5,193	3,991	1,089	998	2,213
Other Grants	48,724	-	10,747	14,051	12,876	2,000	9,050	-	-	-	-	-
Bonds												
Revenue-Supported	926,165	77,206	69,736	227,860	353,722	197,642	-	-	-	-	-	-
CIP GARBs	16,500	-	-	-	-	10,250	6,250	-	-	-	-	-
PFC-Supported	275,000	25,402	22,944	61,595	103,005	62,055	-	-	-	-	-	-
PFC Paygo / TMP	78,165	7,220	6,521	17,507	29,278	17,638	-	-	-	-	-	-
PFC Paygo / CIP	-	-	-	-	-	-	-	-	-	-	-	-
CFC-Supported	54,384	5,023	4,537	12,181	20,370	12,272	-	-	-	-	-	-
CFC pay-as-you-go	61,382	5,670	5,121	13,748	22,991	13,851	-	-	-	-	-	-
Reimbursement of Debt	20,570	1,900	1,716	4,607	7,705	4,642	-	-	-	-	-	-
BIOS/TIF	16,486	-	1,997	1,849	5,340	6,850	450	-	-	-	-	-
Gaming Revenues	55,997	1,940	5,637	24,359	13,164	9,008	1,888	-	-	-	-	-
Equipment / Capital Outlay	30,900	-	3,455	3,135	3,000	3,225	3,320	3,119	3,809	4,200	2,800	838
Natural Gas Revenues	75,409	-	9,528	5,631	6,550	5,000	4,250	3,000	13,500	10,000	8,000	9,950
Airport System Capital Fund	129,178	-	10,225	9,963	20,611	10,608	11,270	10,361	25,479	6,089	10,598	13,975
Total	$ 2,116,893	$ 124,362	$ 161,906	$ 431,773	$ 638,797	$ 387,573	$ 64,448	$ 34,250	$ 149,208	$ 41,578	$ 40,950	$ 42,050

Sources: Allegheny County Airport Authority and LeighFisher, July 2021.

The CIP is a multi-year plan of major capital projects, linked to the Authority's strategic goals, that provides a roadmap to implement projects, including targeted completion dates, budgets, and a funding plan. The projects are informed by the need to maintain existing infrastructure, potential government mandates, and the Authority's master plan (which addressed a 20-year planning period). The CIP was developed to address passenger safety, security, and passenger experience and is also designed to ensure the continued availability of existing facilities and to develop improvements necessary to meet the ongoing air travel demands of the region. Identification of maintenance and facility rehabilitation projects comes from periodic reviews of facilities, field reports, and a deferred maintenance schedule for key Airport System facilities.

In addition to the TMP, airside renovations, and airline fit-outs, four of the larger projects on the Authority's CIP are (1) development of a new cargo 4 facility (Cargo 4), (2) infrastructure improvements for N91 to accommodate continued commercial development, (3) the potential closure of one of the parallel runways, and (4) the potential need to construct a deicing treatment facility.

Cargo 4 is an approximately $63 million project to construct cargo warehouse and apron space to accommodate the expansion of cargo activity at the Airport. It is expected to be funded by a variety of State and Federal grants, including an $18.7 million Better Utilizing Investments to Leverage Development (BUILD) grant from the U.S. DOT, and $25 million in Authority discretionary funds.

Infrastructure development for N91 is expected to cost $44.6 million from 2021 through 2025. The Authority expects to fund $18.1 million of N91 improvements with a variety of State grants, including Redevelopment Assistance Capital Program (RACP) grants, BIOS grants, and PennDOT grants along with a $10 million in Tax Increment Financing (TIF) loan, $6.5 million in BIOS loans, and the remaining $10 million with Gaming Revenues.

The closure of one of the parallel runways was recommended in the 2017 PIT master plan since the de-hubbing of the Airport in 2004 there is no longer a need for three parallel runways. The Authority is working with the FAA on a plan to decommission one of these runways. It is uncertain at this time if the FAA will approve of such a closure or the potential costs of doing so; however, preliminary estimates have been included in the 2021-2030 CIP for this project. If the runway is not closed, the cost to rehabilitate it would be slightly more than the estimated cost to close it. The expected O&M Expense savings from closing the runway were not reflected for purposes of this report.

The potential need to construct a deicing treatment facility has been on the Authority's future CIP for many years. As described in the preliminary official statement under the section titled "Environmental Matters," the Authority has engaged in periodic negotiations with the Pennsylvania Department of Environmental Protection (DEP) regarding alleged violations to a January 1994 Consent Order and Adjudication relating to treatment of stormwater containing deicing chemicals (DIW) since 1998. Specifically, the Authority has proposed the construction of a stormwater deicing treatment facility to treat the stormwater containing deicing chemicals collected in the retention basins. The Authority continues to negotiate the resolution of the DIW issue with DEP and expects that it will need to take some action in the future to address the alleged violations. In the event the Authority needs to construct the treatment facility, the cost to construct it has been estimated by the Authority's consultant to range from approximately $46 million and $74.5 million depending on the effluent limits and other conditions in the final National Pollutant Discharge Elimination System (NPDES) permit renewal. Of this amount, the Authority expects 50% would be funded from state grants and the balance from its discretionary revenues and future Bonds.* There would also be recurring costs for

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* This project has also $40.4 million in PFC funding authority in the event PFC revenues are available in the future. Of this amount $27.2 million was for projects costs of which $3.4 million were spent and the remaining $13.2 for financing costs.

operations and maintenance of the collection and conveyance systems for the treatment facility ranging from $3.3 million to $4.9 million per year. Given the level of uncertainty about the project scope, need, and timing, the capital costs and associated operating expenses have not been incorporated in the financial projections. The earliest the Authority anticipates the treatment facility could be operational is 2027. If the treatment facility was required and constructed, the potential impact on the airline cost per enplanement would range from $0.92 to $1.44 per year in 2027 based on the above assumptions.

Costs for the CIP are expected to be funded by (1) FAA Airport Improvement Program (AIP) entitlement grants-in-aid, (2) Federal discretionary grants, including AIP discretionary and BUILD, (3) PennDOT Bureau of Aviation AIP matching grants, (4) other State grants (including RACP grants), (5) two BIOS loans from the State, which have a pledge on certain real estate leases in N91 that are not part of Revenues under the Master Indenture, (6) $20.6 million from Federal COVID-19 Grants to refund principal and interest on the PNC Line of Credit, (7) funds generated through the residual ratemaking system for capital expenditures, (8) TIF loans, (9) other Authority discretionary funds, including Gaming Revenues and Natural Gas Revenues, and (10) Bonds for the TMP, airside renovations, and tenant fit-outs. All or a portion of PFC and CFC revenues are being dedicated to the TMP. Other than the BIOS loan from the State, the TIF loans for N91, and the potential need to construct a deicing treatment facility, at this time, the Authority does not plan to issue additional debt to fund projects in the CIP other than the TMP, airside renovations, and airline fit-outs.

The current CIP represents to the Authority's best knowledge and belief at this time, all of the significant capital improvements expected to be undertaken through the projection period (2028) and beyond (through 2030). The Authority reassesses its capital needs at least annually and will modify the CIP as necessary to accommodate demand-driven traffic activity, security and health needs, strategic initiatives, receipt of required environmental and other regulatory approvals, and other factors which could result in increases or decreases to the CIP or extend or accelerate the timing to complete certain projects.

The Authority expects that the projects included in the 2021 - 2030 CIP, including the TMP, will provide the necessary Airport facility improvements to satisfy future airline and passenger needs through the projection period (2028).

PLAN OF FINANCE

The costs of the TMP, Airside Renovations, Airline Fit-outs, and other CIP projects are expected to be funded by proceeds of Bonds, federal grants-in-aid, State grants-in-aid, Federal COVID-19 Grants to refund principal and interest on the PNC Line of Credit, passenger facility charge (PFC) revenues, revenues derived from a customer facility charge (CFC) paid by Airport rental car customers, Gaming Revenues, Natural Gas Revenues, and internally generated Airport funds. The Authority applied for grants to help fund the Airside Renovations, including a 75% Voluntary Airport Low Emissions (VALE) program AIP grant with additional grant funding under the CARES Act and APRA Act laws. The Authority is also pursuing a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan from the USDOT to finance certain elements of the TMP. The availability of such a loan is unknown at this time, and no such loan is reflected in the financial projections contained in this report. However, if a TIFIA loan is obtained it is expected to have a positive impact on the economics of the TMP, and would be subordinate to the 2021 Bonds.

Exhibit A shows the estimated sources and uses of funds for projects being funded in whole or in part from bonds. The Authority's independent registered municipal advisor – PFM Financial Advisors LLC (the Municipal Advisor) - provided the estimated sources and uses of funds and estimated debt service requirements for the 2021 Bonds as well as Bonds expected to be issued in January 2023 (the

2023 Bonds) and January 2024 (the 2024 Bonds), collectively the Future Bonds, used to finance a portion of the TMP. Exhibit A also shows the associated sources of funding, including funding from the 2021 Bonds and the anticipated Future Bonds as described below.

As shown in the Exhibit A, the 2021 Bonds are expected to provide proceeds to fund approximately $834 million in costs of the TMP and airside renovations/airline fit-outs, inclusive of amounts to repay draws on the Line of Credit and its associated interest expense. The Authority plans to finance the TMP with (1) the proceeds of the proposed Series 2021, 2023, and 2024 Bonds, (2) approximately $78 million in PFC pay-as-you-go revenues, (3) approximately $61 million in CFC pay-as-you-go revenues, (4) approximately $20.6 million in Federal COVID-19 Grants to refund principal and interest on the PNC Line of Credit, and (4) approximately $21 million in Authority funds. The Authority may elect to use its Line of Credit from time to time prior to the issuance of Additional Bonds (Future Bonds) for the TMP and for any other available legal use.

The specific form, amount, and timing of the Future Bonds required to complete the funding of the costs of the TMP have not been determined at this time. Although the Authority will consider various financing options regarding the anticipated financings, for purposes of this report the Municipal Advisor made the following assumptions regarding the issuance of Bonds to fund portions of the TMP timed for cash flow needs all of which are assumed to provide a cash funded deposit to the Common Debt Service Reserve Account*:

2021 Bonds

2021 Bonds	Revenue-Supported	PFC-Supported	CFC-Supported
Issuance Date	8/26/2021	8/26/2021	8/26/2021
Bond-Funded Project Costs	$602,007,000	$177,500,000	$54,384,100
Assumed Interest Rate(s)	3.67% (TIC, 5% coupon premium scale)	3.67% (TIC, 5% coupon premium scale)	3.82% (TIC, 5% coupon premium scale)
Approx. Interest Rate Cushion Over Current Estimated Market Rates	50 bps.	50 bps.	50 bps.
First Principal Payment	1/1/2026	1/1/2026	1/1/2026
Final Principal Payment	1/1/2056	1/1/2056	1/1/2056
Capitalized Interest	Through 1/1/2025 payment	Through 1/1/2025 payment	Through 1/1/2025 payment
Debt Service Structure	Approximately $40.2 million per year from 2026-2056.	Approximately $11.8 million per year from 2026-2056	Approximately $3.7 million per year from 2026-2056

* Preliminary subject to change.

Future Bonds

2023 Bonds	Revenue-Supported	PFC-Supported	CFC-Supported
Issuance Date	1/1/2023	1/1/2023	1/1/2023
Bond-Funded Project Costs	$168,791,000	$97,500,000	$16,442,200
Assumed Interest Rate(s)	4.50% (TIC)	4.50% (TIC)	5.00% (TIC)
Approx. Interest Rate Cushion Over Current Estimated Market Rates	+130 bps.	+130 bps.	+130 bps.
First Principal Payment	1/1/2026	1/1/2026	1/1/2026
Final Principal Payment	1/1/2056	1/1/2056	1/1/2046
Capitalized Interest	Through 1/1/2025 payment	Through 1/1/2025 payment	Through 1/1/2025 payment
Debt Structure	Approximately $11.6 million per year from 2026-2056	Approximately $6.7 million per year from 2026-2056	Approximately $1.8 million per year from 2026-2043
2024 Bonds	**Revenue-Supported**	**PFC-Supported**	**CFC-Supported**
Issuance Date	1/1/2024	Not Applicable	Not Applicable
Bond-Funded Project Costs	$138,924,900		
Assumed Interest Rate(s)	4.75% (TIC)		
Approx. Interest Rate Cushion Over Current Estimated Market Rates	+150 bps.		
First Principal Payment	1/1/2026		
Final Principal Payment	1/1/2056		
Capitalized Interest	Through 1/1/2025 payment		
Debt Structure	Approximately $9.3 million per year from 2026-2056		

Estimated Debt Service requirements presented in Exhibit C for the proposed 2021 Bonds and Future Bonds were provided by the Municipal Advisor.

The Authority expects to sell its 2021 Bonds, 2023 Bonds, and 2024 Bonds with final maturities of 35 years from their respective dates of issuance.

On December 18, 2019, the Authority defeased all of its long term debt issued under the 1999 trust indenture (the Prior Indenture) with cash on hand from a variety of sources, which allowed the Prior Indenture to be discharged. Under the New AOAs, the Authority will recover the cash it contributed to defease the outstanding revenue bonds (ACAA Loan) through amortization charges included in airline rates and charges from 2021 through 2026. Simultaneously, the Authority replaced its outstanding line of credit with PNC Bank with a new revolving line of credit that was issued as Subordinate Obligations under the Indenture.

PASSENGER FACILITY CHARGES

Exhibit B-1 presents historical and projected PFC collections, interest earnings, and the application of PFCs to pay debt service and pay-as-you-go project costs. It was assumed that the Authority's existing $4.50 per enplaned passenger PFC level would remain constant (at the $4.50 level) throughout the projection period (through 2028).

As noted earlier, in December 2019 the Authority received FAA approval for $62 million for $28 million in PFC-eligible terminal and roadway design costs of the TMP at the $4.50 level of which $34 million is estimated financing costs. The Authority is in the process of submitting an additional PFC application for the eligible construction costs of the TMP and associated financing costs.

It is estimated that approximately $537 million of the project costs for the TMP are PFC-eligible, which exceeds the Airport's PFC financing capacity. A PFC of $4.50 per passenger is projected to support $345 million in TMP project costs, consisting of $78 million in PFC pay-as-you-go (paygo) funding and $275 million in bond-funded project costs as projected in this report. Pending FAA approval of this PFC application, the Authority has been financing project costs on an interim basis through the PNC Line of Credit or other cash on hand, which will be reimbursed from pay-as-you-go PFC revenues and proceeds from the PFC-supported bonds once approved. The Authority's current PFC collection authority extends to December 1, 2034. It is expected that when the outstanding applications are amended and the new application for TMP construction are approved, the Authority's collection authority will extend through or beyond the term of the TMP bonds.

The financial projections presented in this report reflect this expected PFC-use approval in the expected new application and amendments.

CUSTOMER FACILITY CHARGES

Exhibit B-2 presents historical and projected CFC collections, interest earnings, and the application of CFCs to pay debt service and pay-as-you-go project costs. The Authority increased the CFC level to $6.00 per transaction day in February 2020. Rental car negotiations are ongoing and the Authority intends to establish a cap on the CFC rate of $6.00 per day. However, the Authority has reserved the right to adjust the CFC level upward or downward through the CFC Regulation.

DEBT SERVICE

Exhibit C shows historical and projected Debt Service on the Authority's proposed 2021 Bonds and the projected 2023 and 2024 Bonds. Debt service is net of capitalized interest. Exhibit C also shows the historical debt service on the redeemed prior bonds.

OPERATION AND MAINTENANCE EXPENSES

Exhibit D presents historical and projected O&M Expenses of the Airport System for direct and indirect expenses and by cost center for 2018 through 2028. Historical O&M Expenses were obtained from the Authority's records. O&M Expenses for 2021 are based on the Authority's budget. Regarding historical O&M Expenses (2018 through 2019), certain expenses were not included in O&M Expenses, including for rate-setting, because they were considered O&M Expenses under the Prior Indenture. Therefore, the numbers will vary slightly. As noted earlier, the Authority took a series of measures to control and reduce O&M Expenses during 2020 in reaction to the pandemic.

Individual components of O&M Expenses were projected taking into account the 2021 budget; reductions in labor expenses as a result of early retirements, staff reductions, and other reductions in operating expenses in 2020; assumed increases in the unit costs of labor, services, utilities, and supplies as a result of price inflation; and anticipated incremental O&M Expense savings and additional costs associated with the TMP starting in 2025 as developed by the PMO's analysis of operating expenses. Incremental amounts in O&M Expenses are shown as "Incremental O&M Expense for TMP" on Exhibit D and include:

- A reduction in terminal operating expenses to account for a smaller amount of space to maintain, and at a lower cost per square foot due to a newer, more efficient facility.
- A decrease in loading bridge operating and maintenance costs for a reduction in the number of bridges to maintain from 59 to 51.
- An increase in parking costs due to a larger garage (increase from 2,100 public spaces to 3,300 public spaces).
- Reduction in staffing costs for FIS operations due to the reconfiguration of the FIS to accommodate O&D passengers.
- Net reduction in maintenance contracts and services to operate fewer moving walkways but new escalators and elevators.
- Savings in baggage handling system costs from a consolidated operation and less conveyance equipment to maintain and at a lower cost due to a newer, more efficient system.
- Decommissioning of the APM resulting in reduced services contract and utility expenses.
- Savings on roadway expense from fewer lane miles and elevated roadways to maintain.
- An increase to operate a new rental car customer service building.
- A reduction in energy costs from the microgrid being constructed by Peoples Natural Gas, which became operational in July 2021.

The unit costs of salaries, wages, fringe benefits, materials, supplies, and services were assumed to increase an average of 2.5% per year from the 2020 budget.

REVENUES

Exhibit E presents historical and projected Revenues by type of revenue for 2018 through 2028. Historical Revenues were obtained from the Authority's records. Similar to O&M Expenses, certain historical revenues (2018 through 2019) were not considered Revenues under the Prior Indenture.

Individual components of Revenues were projected taking into account actual financial results for 2018 through 2020, the 2021 budget, allowances for inflation as appropriate, and the provisions of leases and agreements between the Authority and the various tenants and users of the Airports. Revenues from sources related to passengers, such as concession revenues, are projected to increase as a function of projected passenger traffic as described in the "Aviation Activity Projections" section of this report and other factors described below.

Amounts shown for 2021 for nonairline revenues are as estimated taking into account budgeted amounts and projected passengers. Amounts shown for 2021 for airline revenues are as calculated per the provisions of the AOA using budgeted O&M Expenses, other rate base requirements, and nonairline revenue credits.

Revenues from sources related to passengers, such as parking and terminal concessions, and from sources related to aircraft activity, such as landing fees, were projected to change in part as a function of the Base passenger traffic recovery scenario. The specific assumptions underlying the individual components of Revenues are summarized in the following sections. In most instances, historical revenues and revenues per passenger are discussed for 2019, the most recent full year unaffected by pandemic-related traffic reductions.

Table 17 presents a summary of Revenues by major category for 2019 through 2020.

Table 17
OPERATING REVENUES BY SOURCE
Pittsburgh International Airport
(in thousands)

				Percent of Total Revenues		
	2018	2019	2020	2018	2019	2020
Airline Revenues	$ 54,769	$ 51,874	$ 42,122	37.4%	36.5%	38.2%
Non-Airline Revenues						
Other Airfield Revenues	208	234	650	0.1%	0.2%	0.6%
Hangar and Field Fees	10,386	9,234	8,745	7.1%	6.5%	7.9%
Other Terminal Rentals	1,828	2,022	2,372	1.2%	1.4%	2.1%
Cargo Building and Ramp Charges	584	612	580	0.4%	0.4%	0.5%
Employee Parking Lot Rental	971	1,646	928	0.7%	1.2%	0.8%
Concession Fees						
Food, Beverage, Retail (AirMall)	8,902	7,925	5,805	6.1%	5.6%	5.3%
Other	5,592	8,096	4,215	3.8%	5.7%	3.8%
Rental Car	10,401	10,196	4,812	7.1%	7.2%	4.4%
Parking Management	33,472	35,558	11,240	22.9%	25.0%	10.2%
Rental Car Service Area Rentals	2,182	2,182	2,484	1.5%	1.5%	2.2%
Utility and Maintenance Services	3,281	3,442	2,498	2.2%	2.4%	2.3%
Baggage System Maintenance	3,999	4,056	3,598	2.7%	2.9%	3.3%
Other	3,074	1,033	2,391	2.1%	0.7%	2.2%
Commercial Development	1,912	1,916	4,541	1.3%	1.3%	4.1%
Investment Income	977	1,789	332	0.7%	1.3%	0.3%
Subtotal - Nonairline Revenues	$ 87,769	$ 89,939	$ 55,191	60.0%	63.3%	50.0%
Other Pledged Revenues						
PFC Application3	$ 9,200	$ -	$ -	6.3%	0.0%	0.0%
CARES/CRRSA/ARPA (PIT/AGC)	-	-	10,496	0.0%	0.0%	9.5%
CARES (County)	-	-	2,157	0.0%	0.0%	2.0%
FEMA Grant	-	-	439	0.0%	0.0%	0.4%
Discretionary (Gas) Revenues	-	3,815	-	0.0%	2.7%	0.0%
Discretionary (Gaming) Revenues	-	1,730	-	0.0%	1.2%	0.0%
	$ 9,200	$ 5,545	$ 13,092	6.3%	3.9%	11.9%
Total Operating Revenues	$ 151,738	$ 147,358	$ 110,404	103.7%	103.8%	100.0%
Plus/Minus Excluded Cost Centers	(5,451)	(5,346)	-	-3.7%	-3.8%	0.0%
Total Revenues	$ 146,287	$ 142,012	$ 110,404	100.0%	100.0%	100.0%

Source: Allegheny County Airport Authority.

Airline Revenues

In 2019, airline revenues represented 36.5% of Revenues. Under the defeased indenture, revenues and expenses from certain Airport System cost centers were excluded as shown in Table 14. Under the new Indenture, all cost centers in the Airport System are included in the definition of Revenues and expenses with the exception of those specifically excluded as described earlier.

Beginning in 2020, required Signatory Airline payments were or are projected to be reduced by Federal COVID 19 Grants used to pay O&M Expenses allocable to the airline supported cost centers.

Landing Fees. Under the AOA, landing fee rates are calculated according to a cost center residual methodology to recover all Airfield Area Costs net of Airfield Area revenues generated from users other than Signatory Airline landing fees.

As shown in Exhibit E-1, the Airfield Area Cost consists of allocable direct and indirect O&M Expenses, Debt Service (net of PFCs Available for Debt Service), the Coverage Requirement (if applicable), the O&M Reserve Requirement, expensed Equipment & Capital Outlays, the Airport System Capital Fund deposit requirement, and Discretionary Revenues or Other Pledged Revenues (if any).

The Airfield Area Cost is then credited with other revenues assigned to Airfield Area (including Non-signatory Airline Landing Fees) to yield the Net Airfield Area Cost. The Net Airfield Area Cost is divided by the landed weight of the Signatory Airlines to determine Signatory Airline Landing Fee Rate per 1,000-pound unit. The non-signatory airline rate is equal to the signatory rate times 120% and the cargo signatory rate is equal to 110% of the signatory rate.

In the first full year after DBO, the Airport System Capital Fund deposit requirement declines from $9.7 million per year (escalated annually by the CPI starting in 2021) to $5 million per year (escalated annually by the CPI starting in 2026). Pre-DBO this amount is allocated 25% to the Airfield and 75% to the Terminal cost centers and after DBO it is allocated 50% to the Airfield and 50% to the Terminal cost centers.

Terminal Rentals. As shown in Exhibit E-2, terminal rental rates for pre-DBO and post-DBO differ as follows:

1. Pre-DBO airlines continue to pay for their baggage handling space based on preferentially leased space. After DBO, all baggage space is leased on a common use basis.

2. For 2021-2026, the terminal rate base includes reimbursement to the Authority of the $24.9 million of cash required to defease the outstanding bonds net of reserves (the ACAA Loan).

3. In 2021 and 2022, $1.5 million will be included in the rate base to upsize the balance in the Renewal & Replacement Fund from $2 million to $5 million.

4. In 2023 and 2024, the net amount needed to meet the Coverage Requirement will be included in the terminal rate base. There is currently approximately $16 million in the Coverage Account pertaining to the prior revenue bonds. This amount will be retained instead of credited to rates and charges to reduce the amount needed in 2025 to meet the Coverage Requirement.

5. In the first full year after DBO, the Airport System Capital Fund deposit requirement declines as noted above and is allocated 50% to the Airfield and 50% to the Terminal cost centers.

As shown in Exhibit E-2, the Terminal Rate is established under a residual methodology to (1) recover all Costs of the Terminal Area net of revenues generated from users in this cost center other than Signatory Airline terminal rentals and (2) pay the Concession Incentive Fee. This Net Terminal Area Cost is divided by Signatory Airline Rented Space to yield the Terminal Rental Rate (per square foot per year).

During the Pre-DBO period, Signatory Airlines pay for their designated exclusive and preferential use areas based on the amount of space leased and the Terminal Buildings Rental Rate. All terminal space other than Exclusive or Preferential Use Premises that is not assigned for exclusive or preferential use is available on a common use basis and charged to the airlines on a per turn fee basis.

At DBO all baggage handling space will be common use. The annual Common Use Baggage Charges equal the product of the amount of inbound and outbound baggage square footage and the terminal building rental rate per square foot. This amount will be allocated and charged to each airline using this space (1) 90% based upon the percentage share of the number of enplaned passengers of all airlines using the space and (2) 10% equally among all airlines using the space, provided that the Authority will rebate the 10% allocation using its Discretionary Revenues.

All holdrooms are charged the same amount, which is equal to the sum of the average square footage of a holdroom in the terminal (excluding the international gates) multiplied by the terminal rental rate.

Table 18 shows the number of aircraft gates assigned to the Signatory Airlines at the Airport as of January 1, 2020 and projected through the term of the AOA. It was assumed that the number of gates leased to the airlines would not change during the projection period.

Table 18
NUMBER OF AIRCRAFT GATES BY AIRLINE
Pittsburgh International Airport
(as of May 2021)

Leased Preferential Use Gates	
American Airlines	6
Delta Air Lines	4
jetBlue	1
Southwest Airlines	4
Spirit Airlines	1
United Airlines	6
Total Preferential Use Gates	22
Authority Gates (Common Use)	30
Total Gates	52

Source: Allegheny County Airport Authority.

Common Use Fees. Airlines that use space in the Terminal that has not been leased to them for use on an exclusive or preferential use basis are charged a per turn fee. Per turn fees are based upon rent associated with an average ticket counter, holdroom, bag makeup, and bag claim area (depending on what common use facilities are used) and assuming four turns per gate per day through DBO. Upon DBO associated rent will be charged based upon four turns per gate per day, excluding baggage space, which will be charged separately through the common use baggage fee. Common use facility fees are projected to increase based upon terminal rental rates and projected uses. Non-Signatory Airlines pay at a rate of 120% of the Signatory rate.

Terminal Ramp Fees. The Terminal Ramp Fee is equal to $40,000 per gate per year (escalated annually by the CPI) through DBO, then increases to $50,000 per gate at DBO (escalated annually by the CPI).

Other Terminal Fees. For 2018 through 2019, the airline fees and charges included "Additional Airline Charges" under the prior AOA. These amounts were cost recovery of debt service allocable to loading bridges, airline tenant finishes, baggage equipment, and aircraft support systems. From 2020 through DBO, American and Southwest will continue to pay a special fee for the automated baggage system equal to rent for the space in the airside core housing the baggage matrix and allocable O&M Expenses and ACAA Loan. Beginning at DBO, airlines that exceed the Authority tenant fit-out allowance and requested Authority financing of this increase (up to a maximum amount) will pay a special tenant fit-out fee equal to the cost of the fit-out amount amortized over 10 years with associated financing costs. As noted earlier, airlines also pay for the use of common use gates per turn and pay for the use of the FIS on a per arriving passenger basis. Virtually all of the Signatory Airlines use common use gates for overflow activities in addition to the gates they lease on a preferential use basis.

Airline Payments per Enplaned Passenger. Exhibit E-3 presents historical and projected airline payments per enplaned passenger from 2018 through 2028.

Non-Airline Revenues

The principal sources of non-airline revenues include ground transportation (including public parking revenues, rental car revenues, transportation network companies or TNCs), terminal concession revenues, non-airline terminal space rents, other facility rentals, interest income, Allegheny County Airport rentals and fees, and miscellaneous other revenues. Projections of non-airline revenues are based on the provisions of existing agreements, Authority resolutions, and allowances for inflation, projected increases in enplaned passengers, and other factors.

Parking Revenues. Historically, public parking has represented the single largest source of revenue at the Airport in 2019 after airline fees and charges, accounting for $35.6 million and approximately 25% of Revenues. With the reduction in travel and parking demand during the pandemic, as well as reduced parking rates, parking revenues in 2020 declined to $11.2 million, 32% of the 2019 amount.

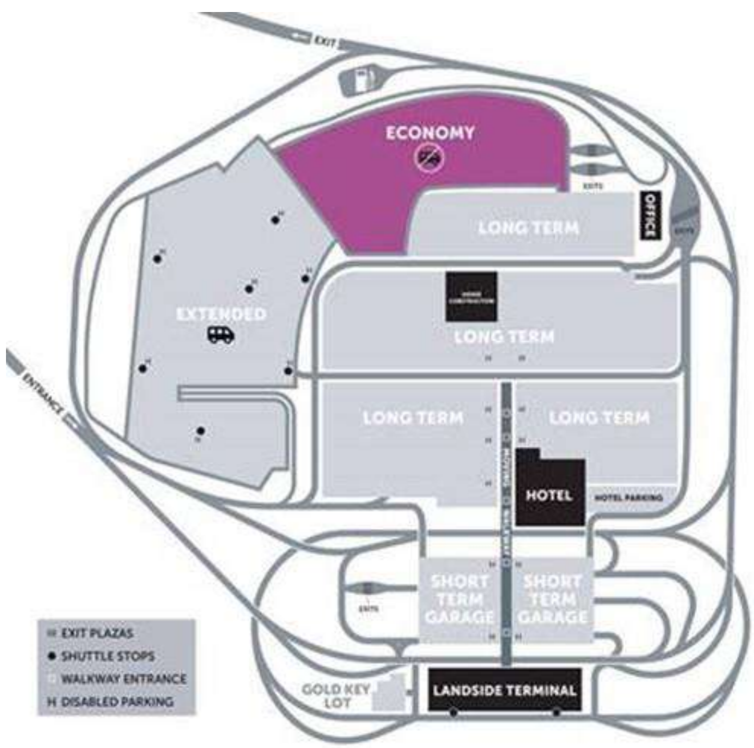
Since 2016, numbers of airport parking transactions have decreased relative to numbers of enplaning passengers at the Airport. Between 2016 and 2019, the number of parking transactions increased 4%, while the number of originating passengers increased 18%, resulting in an 12% decrease in the propensity to park as measured by parking transactions per enplaning passenger. The decreased propensity to park is the result of changing airport access travel choices attributable to changes in the relative cost and convenience of competing travel modes. Short-stay parking transactions have also been reduced as mobile phones make arranging curbside pick-up easier. The decrease in the propensity to park has coincided with the increase in the number of airport trips made by ride-hailing services (also referred to as transportation network companies or TNCs), mainly Uber and Lyft, as discussed in the later section "Transportation Network Companies and Other Ground Transportation."

As shown in Figure 22, the Authority currently offers four parking products: (1) a three-level parking garage adjacent to the landside terminal contains 2,100 public parking spaces, (2) a long-term lot with 7,077 spaces, (3) an extended-term lot with 4,055 spaces, (4) a walkable economy lot with 2,642 spaces, and (4) a premium Gold Key lot located immediately south of the terminal building with 84 spaces that are available for rent on a monthly basis or at a higher rate than the garage. Moving walkways link the long-term surface parking lot to the landside terminal while shuttle bus service is provided to the extended-term lot. The Authority also permits drivers to use an area beyond the Extended Term Lot in a cell phone lot area for up to 30 minutes for free.

As a result of the sharp contraction in passengers from the pandemic, the Authority closed the extended term lot, reduced the number of spaces in the long-term lot, suspended the shuttle bus service, and reduced the parking rates for the garage and long-term lot in late March 2020. On April 12, 2021, the extended term lot was reopened, shuttle bus service was re-instated, and the rates for the garage and long-term lot reverted to the pre-pandemic levels. Also in April 2021, 2,500 spaces from the extended term lot were converted to long-term lot spaces to accommodate employee parking spaces that were displaced for TMP construction staging on the former Concourse E apron.

The Authority launched a new “walkable economy” lot product in early June 2021 as an economic option for price sensitive customers. This product does not have shuttle bus service, but is less than a ten-minute walk to the terminal. The Authority is also launching new parking technology, including touchless ticketing at all entrances, QR Code Readers at entrances and exits for parking patrons that made online reservations, and four pay stations in the terminal for customers who want to avoid contacts.

Figure 22
PARKING LOT LOCATIONS
Pittsburgh International Airport
(June 2021)



Source: Allegheny County Airport Authority.

The Authority pays local parking taxes to Findlay Township and the West Allegheny School District totaling 9% of receipts for Findley Township and 2.5% for the West Allegheny School District.

The public parking facilities at the Airport are operated for the Authority under a management agreement with Grant Oliver. Under the agreement, the Authority receives all revenues and pays all costs of operation and maintenance of the facilities plus a management fee to Grant Oliver equal to 1.75% of parking revenues net of taxes and operating expenses. The budget for operating expenses (including the shuttle buses) is subject to review by the Authority, which can adjust staffing levels and related costs in response to parking demand and level of service standards. The Authority also retains control over the parking rate structure. Grant Oliver has been operating the parking facilities on behalf of the Authority since the opening of the Midfield Terminal in 1992. The current contract extends to September 30, 2022.

Five off-Airport private parking facilities serve Airport passengers in facilities located between four to six miles from the and provide approximately 4,000 additional public parking spaces. These operators mainly compete for patrons who would use the Extended Term Lot as well as the new walkable economy lot that was created to address the off-Airport parking competition. The off-Airport operators pay the Authority based on trips.

The Authority expects to revise parking rates as follows:

Parking Facility	Current	2022	DBO 2025
Garage	$26.00	$26.00	$28.00
Long Term	16.00	16.00	18.00
Walkable Economy	7.00	7.00	8.00
Extended Term	8.00	9.00	9.00

Source: Allegheny County Airport Authority.

Patterns of parking at the Airport, as well as use of other access modes, have been disrupted during the pandemic, and how they may change as passenger demand returns is speculative. For purposes of the financial projections, parking revenues were projected taking into consideration the following:

1. Starting in April 2020 and through mid-April 2021 net revenues reflected the consolidation of parking into the garage and long-term parking and associated rate reductions due to the closure of the extended term lot.

2. In June 2021, coincident with the implementation of the walkable economy product, the rates reverted to their pre-pandemic levels.

3. For 2022, it was assumed there would be a rate increase of $1.00 for the daily extended term and economy lots and a modest incremental increase in revenues for the new walkable economy product.

4. Thereafter, it was assumed that parking revenues would generally increase in relation to passengers through DBO.

5. At DBO, it was assumed there would be a $2.00 increase in daily rates for each of the garage and long-term parking lots (with no change to the economy lots) and a slight shift in

transactions to the more higher priced garage reflecting the availability of more garage spaces.

6. No other rate increases were assumed after 2025 and gross parking revenues are generally projected to increase with passengers. Net parking revenues are projected to increase slightly slower than passengers reflecting the assumption that operating expenses would increase at a faster rate (2.5% per year) than passengers (2.0% per year).

The Authority believes that with the planned opening of the approximately 3,300 space TMP garage in 2025, along with 2,750 adjacent walkable surface stalls, and a sufficient supply of remote Extended Lot stalls (as determined by demand), it will have adequate capacity to serve projected demand through the projection period. In addition, approximately 3,000 spaces in the existing garage could be used for public parking or future potential uses of the existing landside terminal.

Rental Cars. In 2019, rental car revenues were the third largest source of Revenues after airline rates and charges, parking revenues, and terminal concessions accounting for $10.2 million in concession revenues and $2.2 million in service area rentals, equal to approximately 8.6% of Revenues (excluding CFCs). With the reduction in travel and demand for rental cars during the pandemic, rental car revenues in 2020 declined from $10.2 million in 2019 to $4.8 million in 2020.

There are three companies representing seven brands of rental car companies operate on Airport from the garage: (1) Avis Budget Group (Avis and Budget brands) (2) Enterprise Holdings (Enterprise, Alamo, and National brands), and (3) The Hertz Corporation (Hertz and Dollar brands). There are no off-Airport rental car companies currently serving the Airport. The on-Airport rental car companies operate under the terms of the (1) On-Airport Rental Car Concession Agreements that were entered into in 2003 or 2008 with amendments effective in 2013, 2018, and 2020 (Concession Agreements), (2) Rental Car Service Facility, Quick Turn Around Facility, and Ready/Return Garage Lease Agreement that was entered into in 1992 and amended in 2020 (Facility Agreement), and (3) Rental Car Staging Lot Agreements that were entered into in 2016 and terminated in 2020. The 2020 amendments to the Service Facility and the Concession Agreement include changes for which the terms related to the Quick Turn Around Facility, Ready/Return Garage Facility, and Rental Car Staging Lot were included the Concession Agreement.

The Concession Agreements provide that the companies pay the greater of the minimum annual guarantee (MAG) or a percentage fee of 10% of gross revenues plus space rentals (counter, office & garage spaces) and ground rentals (vehicle processing & maintenance) rent for their facilities in the terminal and garage. The MAG payments are waived or reduced if the number of passengers in a given month is less than 75% of the number in the same month of the prior year. Such MAG waivers or reductions applied beginning in March 2020 and expired as of April 1, 2021. Under the Concession Agreements, the rental car companies also lease approximately 800 rental car ready/return stalls located on level 1 of the garage and a Quick Turn Around (QTA) facility for Hertz from the Authority.

Both the Concession Agreements and Facility Agreements were scheduled to expire on April 30, 2020, but the Authority negotiated an extension through the earlier of DBO of the TMP or December 31, 2023, with an effective date of January 1, 2020. The extended Concession Agreements and Facility Agreements (1) broadened the definition of gross revenue (for purposes of the 10% percentage fee) to be all-inclusive with few exceptions, (2) adjusted minimum annual guarantees (MAGs) to equal 85% of 2018 gross revenue, (3) incorporated the ready/return and Hertz QTA into the Concession Agreement, (4) adjusted rents for terminal counters, ready/return spaces, staging areas, and Hertz QTA, and (5) updated other provisions to current industry standards.

With the current rental car agreements expiring on December 31, 2023, the Authority intends to rebid the agreements in the future and enter into new ones that address the move of the ready/return spaces to the TMP MMC. The rental car services areas are expected to remain in their current locations unless the Authority and the rental car companies reach an agreement to move and/or expand the current facilities.

The companies also collect and remit CFCs to the Authority, which are not part of Revenues unless designated by the Authority as Other Pledged Revenues. CFC revenues are funding components of the TMP multimodal center as described earlier. As shown in Figure 19 (CFC Flow of Funds), prior to DBO of the TMP, CFC revenues that have been set aside for TMP project funding since 2017 will be used to pay for rental car-related TMP project costs on a pay-as-you-go basis through DBO. After DBO, the first call on CFC revenues will be to pay rental car-related TMP debt service and all remaining amounts will be applied in the priority for applying any excess amounts as described earlier and illustrated in Figure 19.

Rental car concession revenues have increased with the growth in passengers, but at a slower rate than passengers reflecting the changing composition of the PIT passenger market (increasing share of leisure travels with new ULCC service) and competition from TNCs. Rental car transaction days have been relatively flat since the introduction of TNCs at the Airport in June 2015 through 2017, even as passengers increased, but increased 8% in 2018 and declined 1.6% in 2019. As shown in Table 19, the ratio of transaction days to enplaned passengers declined in 2017 and 2018, remained stable in 2019, but increased in 2020 reflecting the increase in the cap on the numbers of days a CFC is collected, and the shift in demand during the pandemic away from TNCs to parking and rental car transport to airports.

Table 19

HISTORICAL AND ESTIMATED CFC REVENUES IN RELATION TO ENPLANED PASSENGERS

Pittsburgh International Airport

2011 - 2020

	2011 [1]	2012	2013	2014	2015	2016	2017	2018	2019	2020
Revenue	$3,040,737	$4,987,257	$5,060,175	$4,982,379	$5,030,877	$4,990,737	$4,893,987	$5,928,821	$9,868,490	$4,727,120
Rate[2]	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	$3.00	3.00 / $5.50	$5.50	$5.50 / $6.00
Transaction Days[3]	1,013,579	1,662,419	1,686,725	1,660,793	1,676,959	1,663,579	1,670,490	1,722,254	1,733,931	773,195
Percent change		64.0%	1.5%	-1.5%	1.0%	-0.8%	0.4%	3.1%	0.7%	-55.4%
Enplaned Passengers	4,160,015	4,000,467	3,927,993	4,000,461	4,053,880	4,133,653	4,472,888	4,809,865	4,875,029	1,812,404
Percent change		-3.8%	-1.8%	1.8%	1.3%	2.0%	8.2%	7.5%	1.4%	-62.8%
TDs per e.p.	0.24	0.42	0.43	0.42	0.41	0.40	0.37	0.36	0.36	0.43

1. CFC collections commenced March 1, 2011.
2. CFC rate increased effective November 2018 from $3.50 to $5.50 per transaction day and to $6.00 effective February 2020.
3. The 7-day cap on the CFC levy per transaction was raised from 7 days to 30 days in April 2020.

Source: Allegheny County Airport Authority.

Following the reduction in rental car business at airports nationwide, Hertz Global Holdings filed for Chapter 11 bankruptcy protection in May 2020. In June 2021, Hertz emerged from bankruptcy, assumed the agreements for Hertz and Dollar at the Airport, and paid all amounts owed to the Authority. Two of the three Hertz Global brands (Hertz and Dollar) continue their operations at the Airport. Thrifty (a Hertz family brand) left in December 2020 and Payless exited the Airport in April 2020.

As with parking, between 2016 and 2019, transaction days per enplaned passenger decreased as airport access travel choices changed. Over the four years, the propensity to rent as measured by the number of rental car transaction days per enplaned passenger decreased 12%. However, in March 2020 the cap on the CFC levy increased from 7 days to 30 days and based on historical information provided by the rental car companies, this was expected to result in a 13% increase in transaction days per enplaned passenger. As shown in Figure 23, CFC revenues are projected to increase roughly in proportion to projected increases in passengers after making a reduction for competition from TNCs and for an offsetting increase to the CFC level and raising the cap per transaction from 7 to 10 days. No change in the CFC rate per transaction day was assumed.

Rental car concession fees are projected taking into account the following:

1. During the first five months of 2021, rental car concession revenues increased much faster than passengers reflecting the higher rates charged to customers than pre-pandemic years. As noted earlier, the MAGs were contractually waived from March 1, 2020 through March 31, 2021. For the month of April 2021, the share of CRRSA concession grants allocable to the rental car companies is expected to offset the slight shortfall in meeting the MAGs. In May 2021, all but two of the companies paid concession fees in excess of their MAGs.

2. For 2022, it was assumed that rental car concession revenues on a per passenger basis would continue to be higher than in 2018 and 2019.

3. Thereafter, it was assumed that rentall car concession revenues would generally increase with passengers plus an allowance for pricing inflation (1.25% per year).

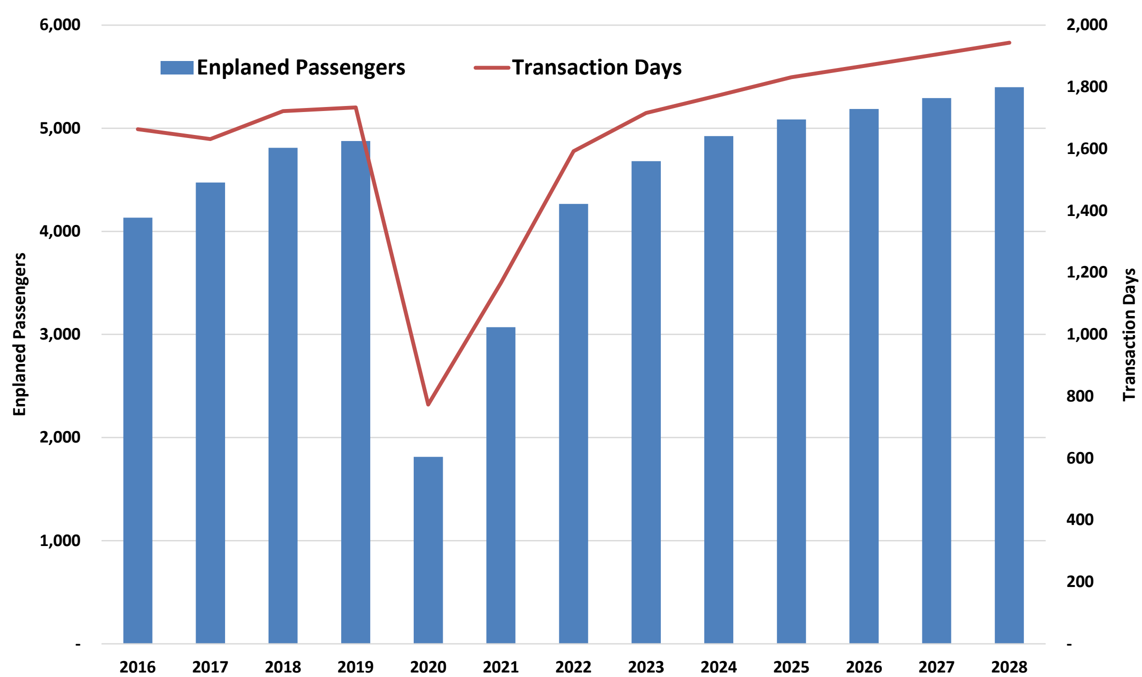
4. Other rental car fees are projected to increase in accordance with the escalators for terminal counters, the Hertz QTA, ready/return space and staging area rental rates in the pre-DBO period, after deducting for the loss of Payless and Thrifty.

5. Although the Authority intends to solicit bids for the vacated Payless and Thrifty spaces during the second half of 2021, no incremental revenues have been incorporated into the projections at this time.

6. For the post-DBO period, the Authority intends to establish rentals for the new facilities to approximate those under the pre-DBO period.

The Authority plans to monitor all modes of ground transportation to assess the potential impacts from TNCs; however, at this time, the Authority cannot predict what impact, adverse or otherwise, those operations will have on other ground transportation services, parking, and rental car operations at the Airport.

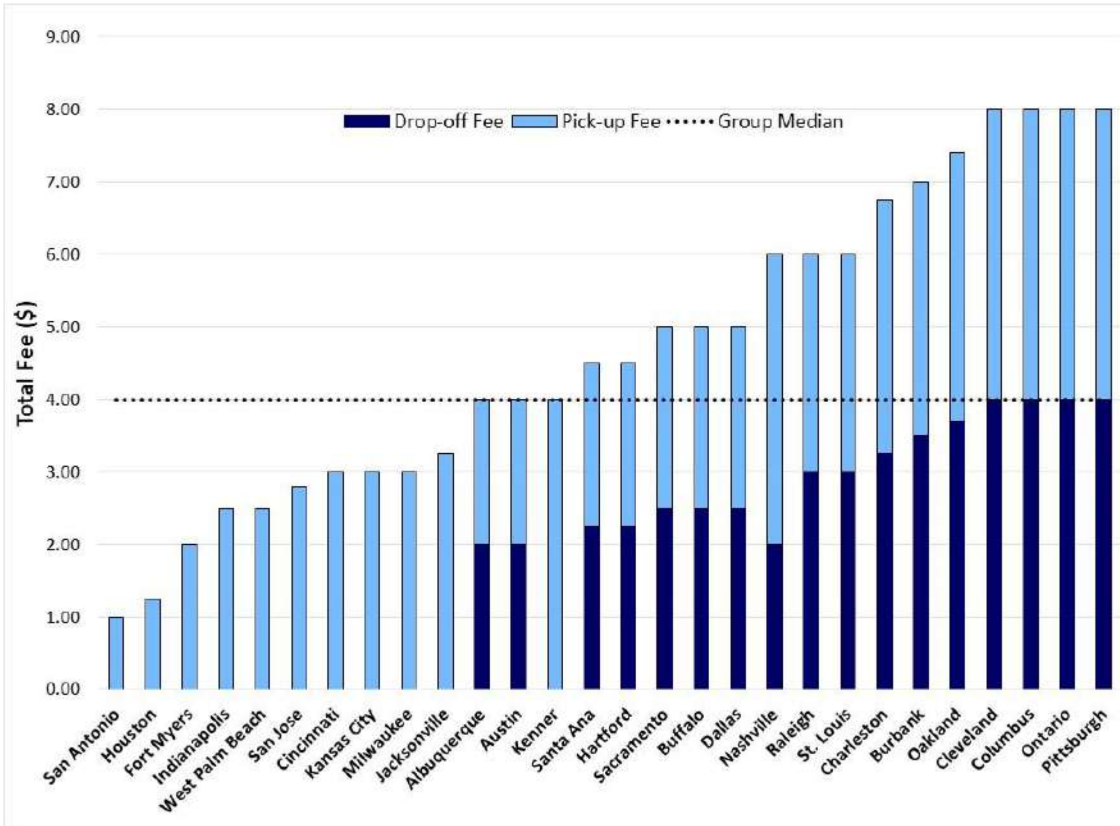
Figure 23
HISTORICAL AND PROJECTED ENPLANED PASSENGERS AND TRANSACTION DAYS
Pittsburgh International Airport
2012 - 2028



Sources: Allegheny County Airport Authority and LeighFisher, July 2021.

Transportation Network Companies and Other Ground Transportation. As noted earlier, TNCs started serving the Airport in June 2015 and increased at a rapid rate during the initial years of operation as experienced at other U.S. airports. In 2015, the Authority entered into Non-Exclusive Operating Permits to Provide Transportation Network Company Services at Pittsburgh International Airport with Lyft and Uber. Effective June 1, 2015, the TNC trip fee was established by the Authority through its Ground Transportation Regulations to be $2.90 per pickup. The permits were replaced with new permits effective March 1, 2019, at which time the trip fee was increased from $2.90 per pickup to $3.35 and a new drop-off trip fee was levied at $3.35 under an update to the Ground Transportation Regulations that became effective February 1, 2019. TNC revenues increased by $1.25 million in 2019 (from $1.95 million in 2018 to $3.2 million in 2019) driven in part by the increase in the pickup fee and the new drop-off fee. The TNC permits were renewed in February 2021 for two years. The TNC rate was raised for both pickup and drop-off to $4.00 effective March 1, 2020. Figure 24 shows how PIT compared to its peer medium hub airports in February 2021.

Figure 24
TNC AIRPORT ACCESS CHARGES
Medium Hub U.S. Airports - February 2021



Source: LeighFisher, February 2021.

The Authority plans to adjust the TNC fees at DBO to reflect their cost to utilize the new terminal and associated facilities. No change in the TNC fee has been assumed for purposes of this report.

Consistent with the increases in the TNC rates, the Authority increased the trip fee for taxis from $2.00 to $2.50 in 2019 and subsequently to $3.00 in 2020. These were the first taxi fee increases in seven years.

Prior to the pandemic, TNCs appeared to have affected all modes of transportation to and from the Airport. However, TNC trips declined more than parking and rental car transactions during the pandemic, reflecting hygiene concerns and the desire to minimize the prospect of close contact with others. Although the ultimate impact is unknown at this time, it is projected that the propensity to use TNCs will eventually return to their pre-pandemic rates and will have a modest negative impact on public parking and rental car revenues as described above. As such, TNC revenues are projected to increase with passengers after making adjustments for trip diversions from public parking and rental cars.

Terminal Concessions. Terminal concession revenues (food/beverage, news/gift, retail, advertising, and other) was the fourth largest source of Revenues in 2019 after airline rates and charges, parking revenues, and rental car revenues accounting for $7.9 million and equating to 5.5% of Revenues.

PIT was one of the first airports in the country to adopt a shopping mall-type approach for its various retail activities, providing an atmosphere and selection of a shopping mall, including various brand-name outlets and "street pricing" based on local comparable prices. As of July 1, 2021, there were 28 operators in 42 locations in the Midfield Terminal, including 25 food and beverage locations, 13 retail locations, 2 service locations, and 2 news and gift locations. By contrast, prior to the COVID-19 pandemic, as of December 31, 2019, there were 39 operators in 74 locations in the Midfield Terminal, including 33 food and beverage locations, 26 retail locations, 7 service locations and 8 news and gift locations. As of July 1, 2021, 78% of the food and beverage locations, 72% of retail locations, 67% of service locations, and 67% of news and gift locations were open.

The various retail activities in the existing terminal are managed by a master concessionaire (Master Concessionaire) pursuant to the terms of a Master Lease Development and Concession Agreement between the Authority and the Master Concessionaire, which extends through December 31, 2029.

The Master Concessionaire is responsible for developing concession and retail activities at the terminal for the Authority. Under the agreement, it has the exclusive rights to all terminal concessions (except public pay telephones), including merchandising, retail, food and beverage services. The Authority receives 100% of revenues from electronic media, such as the Internet, flight information systems, and the wireless airport system. The Master Concessionaire is not authorized to operate terminal concessions except in the case of a vacancy. The Authority receives 77% of the revenues received by the Master Concessionaire from the various subtenants with the balance retained by the Master Concessionaire. The Authority receives 100% of revenues from advertising and electronic media, such as the Internet, flight information systems, and the wireless airport system. The Master Concessionaire also contributes to a repair and replacement fund to cover certain repair and replacement costs and negotiates contracts with each concessionaire, which generally obligate each concessionaire to pay the greater of a percentage of gross revenues (sales) or a MAG.

Most of the stores were temporarily closed beginning in late March 2020 due to the pandemic, and all but a few have reopened. Several are not expected to reopen. MAGs were not waived due to reduced concession sales during the pandemic, and as a result, the Authority decided to classify approximately $2.9 million of the uncollected MAGs as bad debt in its 2020 financial statements.

As noted earlier, the Authority executed a grant with the FAA for the CRRSA concession waiver program that totals $1,010,033 and submitted its concession program to the FAA for approval. The Authority also has submitted a grant application for the concession waiver program under ARPA that totals $4,040,132. A portion of these amounts will accrue to the Authority for unpaid MAGs accrued since December 27, 2020 when CRRSA was enacted.

Food, beverage, and retail revenues in Exhibit E for 2020 include MAG payments to the Master Concessionaire from its subtenants. However, the Authority classified approximately $2.9 million of these revenues as bad debt in 2020. For 2021, the CRRSA and ARPA concession grants allocable to these concessions are expected to cover approximately $2 million in shortfalls in MAGs as passenger levels and terminal concession spending increase post-pandemic. Thereafter, revenues from terminal concessions were projected to increase with enplaned passengers and price inflation, and the terms of Master Concessionaire agreement.

Hangar and Field Fees. Hangar and field fees include ground rents and facility fees, including revenues from the aircraft fuel farm and distribution system and cargo facilities, which are managed by AFCO. These revenues are projected to increase at half the rate of inflation (1.25% per year) and the terms of the agreements. In 2021, one of the three hangars leased by American Airline hangars was returned to the Authority. Terms for the American, Republic, and Titan hangars were renegotiated in 2020. As noted earlier, the Authority is constructing a new Cargo 4, which is expected to be operational in 2024. Revenues from this new facility have not been incorporated into the financial projections.

Utility and Maintenance Services Reimbursements. The Authority recovers utility and maintenance reimbursements from tenants throughout the Airport, which totaled $2.5 million in 2020. The Authority also provides baggage system maintenance service to the airlines, which totaled $3.6 million in 2020. For 2021, the utility reimbursements are projected to decline due to the space returns and baggage maintenance remain stable with 2020. Thereafter, both of these are projected to increase with inflation at 2.5% per year.

Allegheny County Airport. The Authority leases sites, buildings, and other facilities at Allegheny County Airport to various aviation and non-aviation tenants, including several large corporations headquartered in Pittsburgh. Site and building rentals at Allegheny County Airport are governed by the terms of various leases, most of which include allowances for escalation. The Authority also collects landing fees and concession fees at Allegheny County Airport. Landing fees and concession fees are projected to remain constant while site and building rentals are projected to increase with inflation except as otherwise provided by agreement.

Commercial/Industrial Area and Airport Development Area Revenues. The Authority derives ground rentals from the leasing of commercial development land and cargo facilities in the ACAA Cost Center as described earlier. In 2020, commercial development revenues totaled approximately $4.5 million (net of TIF payments), which included certain one-time amounts. For 2021, these revenues are projected to total approximately $3.1 million. Revenues from cargo buildings and ramps totaled approximately $580,000 in 2020. Such revenues were projected based on the terms of the various leases and allowances for anticipated future commercial development known at the time of this report. No incremental revenues were included for Cargo 4.

Interest Income. Interest income is a function of interest rates and available balances in operating funds and accounts held by the Authority and Trustee, including the Debt Service Funds, Debt Service Reserve Accounts, Operation and Maintenance Reserve Account, Renewal and Replacement Account, Coverage Account, and Airport System Capital Fund. Interest income does not include interest earnings on construction funds. The projection assumes that interest rates in the various funds and accounts will average 2.0% per year from 2021 through 2028, and that balances would increase in the Debt Service and the Debt Service Reserve Accounts (reflecting the 2021 Bonds and Future Bonds) but decrease in the Operation and Maintenance Reserve Account (reflecting projected decreases in Operation and Maintenance Expenses at DBO). Interest income totaled $322,000 in 2020 and $1.8 million in 2019.

APPLICATION OF REVENUES

Exhibit F presents historical (2020) and projected (2021 through 2028) application of Revenues as required under the Indenture. Under the Indenture, at the end of each Fiscal Year, after all deposits to the Operation & Maintenance Expense Fund, Debt Service Fund, Debt Service Reserve Fund, Subordinate Obligation Debt Service Fund, Subordinate Obligation Debt Service Reserve Fund, Operation and Maintenance Reserve Account, Renewal and Replacement Account, Equipment and

Capital Outlay Fund, Coverage Account, and Rate Stabilization Fund have been made, remaining moneys not required to make up any deficiencies are to be transferred to the Airport System Capital Fund.

DEBT SERVICE COVERAGE

As shown in Exhibit G, Net Revenues, together with Transfers, are projected to be at least 125% of the Aggregate Annual Debt Service on the 2021 Bonds and the Future Bonds (net of offsetting PFC revenues). This projected result indicates compliance with the Rate Covenant and Additional Bond Test of the Indenture during the projection period.

As noted earlier, the Indenture permits the addition of Other Pledged Revenues and transfers to Net Revenues in computing the debt service coverage requirement for both the Rate Covenant and the Additional Bonds Test. With respect to the Rate Covenant, under the Indenture transfers are limited to no more than 25% of Aggregate Annual Debt Service payable in the Fiscal Year from amounts on deposit in the Coverage Account. For the Additional Bonds Test, transfers are limited to no more than 25% of Aggregate Annual Debt Service on the Outstanding Bonds and the proposed Series of Bonds from amounts projected to be on deposit in the Coverage Account.

Exhibit A
TMP PLAN OF FINANCE / SOURCES AND USES OF FUNDS
Allegheny County Airport Authority

Terminal Modernization Program, Airside Renovation, and Airline Fit-outs

	PFC-Supported Bonds		**GARBs**			**CFC-Supported Bonds**		**Total**
	Issue 1 2021	Issue 2 2023	Issue 1 2021	Issue 2 2023	Issue 3 2024	2021	2023	
PLAN OF FINANCE								
Sources of Funds								
Bond / Loan Proceeds	$ 221,259	$ 114,380	$ 770,843	$ 198,075	$ 155,365	$ 47,701	$ 20,595	$ 1,528,217
Other Funding Sources	-	-	-	-	-	-	-	
AIP / VALE (for PCAir)	-	-	-	9,782	4,818	-	-	14,600
State Grants	-	-	-	-	-	-	-	-
PFC paygo	15,545	62,620	-	-	-	-	-	78,165
CFC paygo	-	-	-	-	-	8,000	53,382	61,382
Reimbursement of Debt[1]	-	-	20,570	-	-	-	-	20,570
ACAA	-	-	11,473	4,398	5,134	-	-	21,005
Construction Fund Interest Income	76	785	266	1,359	1,119	16	132	3,754
DSRF Interest Income during Cap-I	39	202	137	349	140	8	53	928
Cap. Interest Account Interest Income	58	186	204	323	81	13	37	902
Total Sources of Funds	$ 236,978	$ 178,174	$ 803,493	$ 214,286	$ 166,656	$ 55,738	$ 74,199	$ 1,729,524
Uses of Funds								
Construction Fund/Project Costs								
Bond Funded	$ 177,500	$ 97,500	$ 618,450	$ 168,791	$ 138,925	$ 37,941	$ 16,442	$ 1,255,549
Reimbursement of Debt[1]	-	-	20,570	-	-	-	-	20,570
Other Funding Sources	15,545	62,620	11,473	14,180	9,952	8,000	53,382	175,152
Total Project Costs	193,045	160,120	650,493	182,971	148,877	45,941	69,824	1,451,272
Bond Reserve Account	11,734	6,722	40,873	11,638	9,303	2,532	1,765	84,565
Capitalized Interest	30,614	10,294	106,655	17,827	7,380	6,600	2,060	181,429
PNC Line of Credit Interest	485	348	1,645	661	162	423	435	4,161
Issuance Costs	1,101	689	3,827	1,189	935	241	116	8,097
Total Uses of Funds	$ 236,978	$ 178,174	$ 803,493	$ 214,286	$ 166,656	$ 55,738	$ 74,199	$ 1,729,524

Source: PFM and Allegheny County Airport Authority, July 2021.

Exhibit B-1
PASSENGER FACILITY CHARGES
Pittsburgh International Airport
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
PFC Collections											
Enplaned Passengers	4,810	4,875	1,812	3,070	4,266	4,680	4,924	5,086	5,188	5,292	5,397
Percent of PFC Eligible Passengers	89.5%	93.1%	94.4%	85.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
PFC Eligible Enplaned Passengers	4,307	4,539	1,710	2,609	3,839	4,212	4,431	4,577	4,669	4,762	4,858
PFC Level	$ 4.50	$4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50
less: PFC Airline Collection Fee	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Net PFC Level	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39	$ 4.39
PFC Collections	$ 18,909	$ 19,925	$ 7,508	$ 11,455	$ 16,854	$ 18,491	$ 19,454	$ 20,095	$ 20,497	$ 20,907	$ 21,325
Interest Earnings	8	21	3	-	-	-	-	16	20	25	29
Total PFC Revenues	$ 18,917	$ 19,946	$ 7,510	$ 11,455	$ 16,854	$ 18,491	$ 19,454	$ 20,112	$ 20,517	$ 20,931	$ 21,354
Application of PFC Revenue											
Reimbursement Authority Applied to CIP Project Costs	-	$ 15,544		-	-	-	-	-	-	-	-
TMP Paygo		(4,402)	(11,143)	(7,822)	(16,854)	(18,491)	(19,454)	-	-	-	-
Rates and Charges Credit	(9,200)	-	-	-	-	-	-	-	-	-	-
Future PFC Bond Debt Service	-	-	-	-	-	-	-	(18,448)	(18,453)	(18,448)	(18,454)
Total annual use of PFC revenues	$ (9,200)	$ 11,142	$ (11,143)	$ (7,822)	$ (16,854)	$ (18,491)	$ (19,454)	$ (18,448)	$ (18,453)	$ (18,448)	$ (18,454)
PFC Cashflow											
PFC Fund Beginning Balance			-	(3,633)	-	-	-	-	166	373	621
Annual Cash Flow			$ (3,633)	$ 3,633	$ -	$ -	$ -	$ 1,663	$ 2,064	$ 2,483	$ 2,900
Incremental PFCs Applied to Airline Rate Base							-	(1,497)	(1,858)	(2,235)	(2,610)
Pay-as-you-go Other CIP			-	-	-	-	-	-	-	-	-
PFC Fund Ending Balance	$ (332)	$ -	$ (3,633)	$ -	$ -	$ -	$ -	$ 166	$ 373	$ 621	$ 911

Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit B-2
CUSTOMER FACILITY CHARGES
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Enplaned Passengers	4,810	4,875	1,812	3,070	4,266	4,680	4,924	5,086	5,188	5,292	5,397
Percent Change	7.5%	1.4%	-62.8%	69.4%	39.0%	9.7%	5.2%	3.3%	2.0%	2.0%	2.0%
Base CFC Rate	$ 3.37	$ 5.50	$ 5.93	**$ 6.00**	$ 6.00	$ 6.00	$ 6.00	**$ 6.00**	$ 6.00	$ 6.00	$ 6.00
Transaction Days[1]	1,722	1,734	773	1,167	1,593	1,716	1,773	1,831	1,868	1,905	1,943
Interest Income	-	332	141	50	-	-	-	-	-	-	-
CFC Revenues	$ 5,811	$ 9,537	$ 4,726	$ 7,049	$ 9,556	$ 10,297	$ 10,637	$ 10,988	$ 11,207	$ 11,431	$ 11,660
Transaction Day Growth	5.6%	0.7%	-55.4%	50.9%	36.5%	7.8%	3.3%	3.3%	2.0%	2.0%	2.0%
Total Annual CFC Revenues	$ 5,811	$ 9,537	$ 4,727	$ 7,049	$ 9,556	$ 10,297	$ 10,637	$ 10,988	$ 11,207	$ 11,431	$ 11,660
Annual Uses of CFC Revenues											
CFC Fund Beginning Balance		$ 9,392	$ 19,260	$ 10,981	$ -	$ -	$ -	$ 144	$ -	$ 3,915	$ 8,057
Deposits											
Annual Collection		9,537	4,727	7,049	9,556	10,297	10,637	10,988	11,207	11,431	11,660
Interest Earnings		332	-	-	-	-	-	-	-	-	-
Withdrawals											
CFCs to be Set Aside for TMP Garage											
CFC PAYGO for TMP		-	(13,007)	(18,030)	(9,556)	(10,297)	(10,493)	-	-	-	-
CFCs Designated to Pay Debt Service		-	-	-	-	-	-	(4,286)	(4,292)	(4,290)	(4,294)
CFCs Designated to Pay O&M Expense								(629)	(644)	(660)	(677)
Excess CFCs Available for Other Uses	$ 9,392	$ 19,260	$ 10,981	$ -	$ -	$ -	$ 144	$ 6,845	$ 6,915	$ 11,057	$ 15,424
R&R Account		-	-	-	-	-	-	(3,000)	(3,000)	(3,000)	(3,000)
CFC Deficiency Account		-	-	-	-	-	-	(3,845)	-	-	-
CFC Fund Ending Balance		$ 19,260	$ 10,981	$ -	$ -	$ -	$ 144	$ -	$ 3,915	$ 8,057	$ 12,424

1. The cap on the number of days subject to a CFC increased from 7 to 10 days effective April 1, 2020.
Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit C
DEBT SERVICE REQUIREMENTS
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Prior Bonds[1]	$ 23,695	$ 21,191	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Future Bonds											
Revenue-Supported Bonds											
2021 Bonds		$ -	$ -	$ -	$ -	$ -	$ -	$ 40,869	$ 40,869	$ 40,871	$ 40,869
2023 Bonds		-	-	-	-	-	-	11,638	11,636	11,638	11,634
2024 Bonds		-	-	-	-	-	-	9,300	9,299	9,298	9,298
PFC-Supported Bonds											
2021 Bonds		-	-	-	-	-	-	11,731	11,732	11,731	11,734
2023 Bonds		-	-	-	-	-	-	6,717	6,721	6,717	6,720
2024 Bonds		-	-	-	-	-	-	-	-	-	-
CFC-Supported Bonds											
2021 Bonds						-	-	2,527	2,529	2,530	2,529
2023 Bonds						-	-	1,760	1,763	1,760	1,765
Total Senior Lien	$ 23,695	$ 21,191	$ -	$ -	$ -	$ -	$ -	$ 84,542	$ 84,548	$ 84,545	$ 84,549
Subordinate 2001A	-	-	-	-	-	-	-	-	-	-	-
Subordinate 2001B	-	-	-	-	-	-	-	-	-	-	-
Energy Saving Loan	1,117	-	-	-	-	-	-	-	-	-	-
Subordinate Obligations	1,117	-	-	-	-	-	-	-	-	-	-
Total Debt Service	$ 24,812	$ 21,191	$ -	$ -	$ -	$ -	$ -	$ 84,542	$ 84,548	$ 84,545	$ 84,549
Debt Service by Cost Center											
Airfield Area	$ 310	$ 357	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Terminal Area	18,933	15,814	-	-	-	-	-	84,542	84,548	84,545	84,549
Terminal Ramp Area	492	516	-	-	-	-	-	-	-	-	-
Parking and Rental Car Area	3,116	3,146	-	-	-	-	-	-	-	-	-
Hangar and Field Support Area	1,962	1,358	-	-	-	-	-	-	-	-	-
ACAA Area	-	-	-	-	-	-	-	-	-	-	-
Allegheny County Airport	-	-	-	-	-	-	-	-	-	-	-
Total Debt Service	$ 24,812	$ 21,191	$ -	$ -	$ -	$ -	$ -	$ 84,542	$ 84,548	$ 84,545	$ 84,549

1. Amounts for 2018 and 2019 include amounts for accelerated debt service payments net of excess bond proceeds per AOA and therefore exceed actual debt service.

Sources: Allegheny County Airport Authority, LeighFisher, PFM, July 2021.

Exhibit D
OPERATION AND MAINTENANCE EXPENSES
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
TOTAL EXPENSES											
Pittsburgh International Airport											
Personnel	$ 44,894	$ 44,771	$ 40,082	$ 39,335	$ 40,663	$ 42,032	$ 43,083	$ 44,160	$ 45,264	$ 46,396	$ 47,556
Utilities	10,995	10,602	9,086	10,410	10,824	11,244	11,526	11,814	12,109	12,412	12,722
Cleaning & Maintenance	18,359	18,500	18,171	18,152	18,998	19,856	20,352	20,861	21,383	21,917	22,465
Professional Services	23,313	22,935	24,660	23,046	24,487	25,944	26,592	27,257	27,939	28,637	29,353
Other	11,902	10,238	9,882	12,635	13,776	14,927	15,300	15,683	16,075	16,477	16,888
Allegheny County Airport						-					
Personnel	2,130	1,736	1,904	1,708	1,751	1,794	1,839	1,885	1,932	1,981	2,030
Utilities	379	360	344	417	428	439	450	461	472	484	496
Cleaning & Maintenance	42	31	29	3	3	3	3	3	3	4	4
Professional Services	196	186	59	342	396	449	460	472	484	496	508
Other	314	282	169	357	375	393	403	413	423	434	445
Subtotal	$ 112,522	$ 109,640	$ 104,386	$ 106,405	$ 111,701	$ 117,082	$ 120,009	$ 123,009	$ 126,084	$ 129,236	$ 132,467
Incremental R&D and Investments[1]				500	1,000						
Incremental O&M Expense for TMP (Savings)[2]	-	-	-	-	-	-	-	(21,196)	(21,726)	(22,269)	(22,826)
Total Operation and Maintenance Expenses	$ 112,522	$ 109,640	$ 104,386	$ 106,905	$ 112,701	$ 117,082	$ 120,009	$ 101,813	$ 104,359	$ 106,968	$ 109,642
Percent Change	9.0%	-2.6%	-4.8%	2.4%	5.4%	3.9%	2.5%	-15.2%	2.5%	2.5%	2.5%
O&M ALLOCATION BY COST CENTER											
Airfield Area	$ 21,504	$ 23,839	$ 24,408	$ 25,462	$ 26,637	$ 27,845	$ 28,541	$ 29,255	$ 29,986	$ 30,736	$ 31,504
Terminal Area	69,988	70,500	74,115	76,487	80,359	84,332	86,440	67,406	69,091	70,818	72,588
Terminal Ramp Area	7,603	4,370	-	-	-	-	-	-	-	-	-
Parking and Rental Car Area	5,705	3,668	-	-	-	-	-	-	-	-	-
Hangar and Field Support Area	4,228	3,934	-	-	-	-	-	-	-	-	-
Military Facilities	-	-	-	-	-	-	-	-	-	-	-
Total Airline Rate Based O&M Expenses	$ 109,027	$ 106,311	$ 98,523	$ 101,949	$ 106,996	$ 112,177	$ 114,982	$ 96,661	$ 99,077	$ 101,554	$ 104,093
Cargo Area	435	735	-	-	-	-	-	-	-	-	-
ACAA Area	-	-	3,358	2,128	2,753	1,826	1,872	1,919	1,966	2,016	2,066
Airport Development Area	-	-	-	-	-	-	-	-	-	-	-
Allegheny County Airport	3,060	2,594	2,505	2,827	2,952	3,078	3,155	3,234	3,315	3,398	3,483
Total Expenses	$ 112,522	$ 109,640	$ 104,386	$ 106,905	$ 112,701	$ 117,082	$ 120,009	$ 101,813	$ 104,359	$ 106,968	$ 109,642
OPERATION AND MAINTENANCE EXPENSES[3]	$ 109,027	$ 106,311	$ 104,386	$ 106,905	$ 112,701	$ 117,082	$ 120,009	$ 101,813	$ 104,359	$ 106,968	$ 109,642
Percent Change	9.5%	-2.5%	-1.8%	2.4%	5.4%	3.9%	2.5%	-15.2%	2.5%	2.5%	2.5%

1. Incremental O&M Expenses for 2020 through 2022 for investments in R&D and other initiatives allocable to ACAA cost center.
2. Incremental O&M Expenses pre-DBO related to TMP development (e.g., employee parking shuttle). Amounts as of DBO represent primarily savings from the TMP (see report for details).
3. Under prior AOA and indenture, O&M Expenses only do not include Excluded Cost Centers. Beginning in 2020 under new Indenture all expenses included.

Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit E
REVENUES
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Airline Rates and Charges											
Signatory Passenger Airline Landing Fees	$ 12,315	$ 14,444	$ 9,595	$ 11,581	$ 15,560	$ 17,828	$ 18,936	$ 19,390	$ 21,430	$ 22,122	$ 22,833
Non-Signatory Passenger Landing Fees	1,289	1,261									
Cargo Carrier Landing Fees	1,250	1,585	1,779	2,243	2,309	2,447	2,507	2,523	2,775	2,850	2,928
Terminal Space Rentals	30,484	26,713	24,406	23,723	22,112	22,280	23,746	40,684	42,635	42,905	43,235
Non-Signatory Terminal Space Rentals	345	300									
Less: Airline Waivers[1]		(1,930)	(532)	-	-	-	-	-	-	-	-
Parking Fees	454	625	943	430	569	625	657	679	701	724	748
Gate & FIS Use Charges	4,215	4,730	2,276	2,827	2,811	4,137	4,373	4,320	4,482	4,542	4,606
Terminal Ramp Rentals	743	790	880	892	915	937	961	1,100	1,128	1,156	1,185
Total Airline Rates and Charges	$ 51,096	$ 48,518	$ 39,348	$ 41,696	$ 44,275	$ 48,255	$ 51,180	$ 68,696	$ 73,151	$ 74,299	$ 75,535
Additional Airline Charges											
Aircraft Support Charges	$ 311	$ 212	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Tenant Equipment and Finish Charges	715	425	-	-	-	-	-	-	-	-	-
Special Automated Baggage Facilities Charges	2,647	2,718	2,773	2,639	2,609	2,674	2,741	-	-	-	-
Support Facilities Charges	-	-	-	-	-	-	-	-	-	-	-
Total Additional Charges	$ 3,673	$ 3,356	$ 2,773	$ 2,639	$ 2,609	$ 2,674	$ 2,741	$ -	$ -	$ -	$ -
Percent Change	-66.2%	-8.6%	-17.3%	-4.9%	-1.1%	2.5%					
Nonairline Revenues											
Other Airfield Revenues	$ 208	$ 234	$ 650	$ 656	$ 662	$ 668	$ 674	$ 680	$ 686	$ 692	$ 699
Hangar and Field Fees	10,386	9,234	8,745	8,334	7,952	8,045	8,132	8,221	8,311	8,403	8,497
Other Terminal Rentals	1,828	2,022	2,372	2,311	2,369	2,428	2,489	1,906	1,950	1,996	2,044
Cargo Building and Ramp Charges	584	612	580	592	599	607	614	622	630	638	646
Employee Parking Lot Rental	971	1,646	928	940	1,024	1,154	1,213	1,259	1,285	1,310	1,337
Concession Fees											
Food, Beverage, Retail (AirMall)[2]	8,902	7,925	5,805	6,546	6,544	7,324	7,860	8,632	8,914	9,206	9,508
Other[2]	5,592	8,096	4,215	4,701	5,646	6,020	6,248	6,423	6,537	6,653	6,771
Rental Car	10,401	10,196	4,812	7,986	9,607	10,611	11,236	11,896	12,437	13,003	13,595
Parking Management	33,472	35,558	11,240	22,240	30,561	33,783	35,778	39,832	39,895	39,964	39,963
Rental Car Service Area Rentals	2,182	2,182	2,484	2,415	2,444	2,473	2,504	3,157	3,157	3,157	3,157
Utility and Maintenance Services	3,281	3,442	2,498	2,391	2,451	2,512	2,575	2,640	2,706	2,773	2,843
Baggage System Maintenance	3,999	4,056	3,598	3,598	3,688	3,781	3,875	1,114	1,142	1,170	1,200
Other	3,074	1,033	2,391	1,324	1,339	1,355	1,372	1,389	1,407	1,426	1,444
Customer Facility Charges - Debt Service	-	-	-	-	-	-	-	4,286	4,292	4,290	4,294
Customer Facility Charges - O&M	-	-	-	-	-	-	-	629	644	660	677
Commercial Development	1,912	1,916	4,541	2,875	3,101	3,198	3,316	3,399	3,491	4,131	4,195
Investment Income	977	1,789	332	348	369	376	376	1,664	1,730	1,733	1,738
Subtotal - Nonairline Revenues	$ 87,769	$ 89,939	$ 55,191	$ 67,258	$ 78,355	$ 84,335	$ 88,262	$ 97,749	$ 99,215	$ 101,207	$ 102,605
Percent Change	14.1%	2.5%	-38.6%	21.9%	16.5%	7.6%	4.7%	10.7%	1.5%	2.0%	1.4%

Exhibit E
REVENUES
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Nonairline Revenues by Cost Center											
Airfield Area	$ 4,232	$ 1,673	$ 10,842	$ 10,103	$ 9,744	$ 9,859	$ 9,967	$ 10,485	$ 10,155	$ 10,269	$ 10,385
Terminal Area	24,343	25,505	36,586	51,006	62,177	67,890	71,535	80,358	81,998	83,171	84,322
Terminal Ramp Area	883	632	-	-	-	-	-	-	-	-	-
Parking and Rental Car Area	51,731	56,090	-	-	-	-	-	-	-	-	-
Hangar and Field Support Area	10,860	10,080	-	-	-	-	-	-	-	-	-
Military Facilities	165	166	-	-	-	-	-	-	-	-	-
Cargo Area	592	619	-	-	-	-	-	-	-	-	-
Commercial/Industrial Area / ACAA Area	678	559	5,144	3,481	3,716	3,818	3,942	4,033	4,133	4,781	4,853
Airport Development Area	1,234	1,356	-	-	-	-	-	-	-	-	-
Allegheny County Airport	3,026	2,812	2,618	2,668	2,718	2,768	2,818	2,873	2,928	2,986	3,045
Total Nonairline Revenues	$ 97,745	$ 99,491	$ 55,191	$ 67,258	$ 78,355	$ 84,335	$ 88,262	$ 97,749	$ 99,215	$ 101,207	$ 102,605
			-	-	-	-	-	-	-	-	-
ACAA Discretionary Revenues											
PFC Application[3]	$ 9,200	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
CARES/CRRSA/ARPA (PIT/AGC)[4]	-	-	10,496	25,000	9,500	6,500	4,184	-	-	-	-
CARES (County)[4]			2,157	57	148	-	-	-	-	-	-
FEMA Grant[4]			439	-	-	-	-	-	-	-	-
Discretionary (Gas) Revenues[4]	-	3,815	-	-	-	-	-	5,300	5,300	5,300	5,300
Supplemental Gaming Revenues for BHS[4]	-	-	-	-	-	-	-	1,903	1,995	2,007	2,023
Discretionary (Gaming) Revenues[4]	-	1,730	-	-	-	-	-	4,297	4,205	4,192	4,177
	$ 9,200	$ 5,545	$ 13,092	$ 25,057	$ 9,648	$ 6,500	$ 4,184	$ 11,500	$ 11,500	$ 11,500	$ 11,500
Total Nonairline/Discretionary Revenues	$ 96,969	$ 95,484	$ 68,283	$ 92,315	$ 88,003	$ 90,835	$ 92,446	$ 109,249	$ 110,714	$ 112,706	$ 114,105
Total Operating Revenues	$ 151,738	$ 147,358	$ 110,404	$ 136,650	$ 134,888	$ 141,764	$ 146,368	$ 177,945	$ 183,865	$ 187,006	$ 189,640
Less: Excluded Cost Centers											
Cargo Area	(592)	(619)	-	-	-	-	-	-	-	-	-
Commercial/Industrial Area[5]	(678)	(559)	-	-	-	-	-	-	-	-	-
Airport Development Area[5]	(1,234)	(1,356)	-	-	-	-	-	-	-	-	-
Allegheny County Airport	(3,026)	(2,812)	-	-	-	-	-	-	-	-	-
Plus											
50% of Net Revenues of ADA	-	-	-	-	-	-	-	-	-	-	-
50% Net Cargo Revenues	78	-	-	-	-	-	-	-	-	-	-
Revenues	$ 146,287	$ 142,012	$ 110,404	$ 136,650	$ 134,888	$ 141,764	$ 146,368	$ 177,945	$ 183,865	$ 187,006	$ 189,640

1. Air service incentives under the Authority's air service incentive program.
2. Reflects shift of advertising to other category in 2019. Includes TNC and other ground transportation trip fees.
3. Starting in 2020 under the new Indenture, PFC revenues will be applied as an offset to debt service instead of counted as a Revenues.
4. Designated as "Other Pledged Revenues" under the Indenture.
5. Amounts shown for Commercial/Industrial Area and Airport Development Area cost centers are net of operating expenses and Tax Increment Financing (TIF).

Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit E-1
CALCULATION OF AIRLINE TERMINAL RENTAL RATE
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Terminal Area Cost											
O&M Expenses	$ 69,988	$ 70,500	$ 74,115	$ 76,487	$ 80,359	$ 84,332	$ 86,440	$ 67,406	$ 69,091	$ 70,818	$ 72,588
Debt Service:											
Prior Bonds	18,933	15,814	-	-	-	-	-	-	-	-	-
Revenue-Supported Bonds											
2021 Bonds	-	-	-	-	-	-	-	40,869	40,869	40,871	40,869
2023 Bonds	-	-	-	-	-	-	-	11,638	11,636	11,638	11,634
2024 Bonds	-	-	-	-	-	-	-	9,300	9,299	9,298	9,298
PFC-Supported Bonds			-	-	-	-	-	18,448	18,453	18,448	18,454
Less: PFCs Available for Debt Service[1]	(5,400)	-	-	-	-	-	-	(19,945)	(20,311)	(20,683)	(21,064)
CFC-Supported Bonds	-	-	-	-	-	-	-	2,527	2,529	2,530	2,529
2021 Bonds	-	-	-	-	-	-	-	1,760	1,763	1,760	1,765
ACAA Loan Repayment	-	-	-	11,211	2,491	4,983	6,229	-	-	-	-
Natural Gas Revenues	-	(450)	-	-	-	-	-	(5,300)	(5,300)	(5,300)	(5,300)
Fund Deposit Requirements											
Equipment & Outlay Fund	294	663	1,135	1,151	1,180	1,210	1,240	1,271	1,303	1,335	1,369
O & M Reserve Fund	263	284	141	300	689	526	351	(2,008)	281	288	295
Renewal & Replacement Fund (Repayment to ACAA)	-	-	-	1,500	1,500	-	-	-	-	-	-
Coverage Requirement	-	-	-	-	-	-	-	-	-	-	-
Airport System Capital Fund	3,272	3,333	-	7,303	8,525	8,781	9,044	2,500	2,575	2,652	2,732
Concession Incentive Fee[2]	3,308	3,823	1,713	2,633	3,288	3,613	3,818	4,196	4,256	4,319	4,380
Total Terminal Area Cost	$ 90,658	$ 93,967	$ 77,104	$ 100,586	$ 98,033	$ 103,444	$ 107,122	$ 132,662	$ 136,443	$ 137,974	$ 139,548
Add/(Less)											
Tenant Equipment and Finishes Charges	(715)	(425)	-	-	-	-	-	-	-	-	-
Special Automated Baggage Facilities Charges	(2,647)	(2,718)	(2,773)	(2,639)	(2,609)	(2,674)	(2,741)	-	-	-	-
Gate Usage Fees and FIS Fees	(4,215)	(5,271)	(2,276)	(2,827)	(2,811)	(4,137)	(4,373)	(4,320)	(4,482)	(4,542)	(4,606)
Terminal Ramp Fees	-	-	(880)	(892)	(915)	(937)	(961)	(1,100)	(1,128)	(1,156)	(1,185)
Gaming Revenues Allocable to Terminal Area	-	-	-	-	-	-	-	(4,297)	(4,205)	(4,192)	(4,177)
CARES, CRRSA, ARPA (PIT)	-	-	(7,954)	(19,500)	(7,410)	(5,525)	(3,766)	-	-	-	-
CARES (County)			(1,827)								
FEMA Grant			(401)								
Other Terminal Area Non-Airline Revenues[3]	(16,766)	(17,090)	(36,586)	(51,006)	(62,177)	(67,890)	(71,535)	(80,358)	(81,998)	(83,171)	(84,322)
Net Cost (Revenues) of Parking & Rental Car Area	(35,830)	(41,749)	-	-	-	-	-	-	-	-	-
Net Cost of Terminal Area	$ 30,484	$ 26,713	$ 24,406	$ 23,723	$ 22,112	$ 22,280	$ 23,746	$ 42,587	$ 44,630	$ 44,912	$ 45,258
Airline Rented Space (sq ft) excl. Rented Baggage Space											
Signatory	209	149	103	101	101	101	101	112	112	112	112
Non-Signatory with 20% premium added			3	2	2	3	3	3	3	3	3
Airline Rented Baggage Space (sq ft)	-	-	45	46	46	46	46	93	93	93	93
Total Airline Rented Space	209	149	151	149	150	150	150	208	208	208	208
Signatory Terminal Rental Rate per sq ft	**$ 145.92**	**$ 179.61**	**$ 161.52**	**$ 159.24**	**$ 147.84**	**$ 148.58**	**$ 158.35**	**$ 205.23**	**$ 215.08**	**$ 216.44**	**$ 218.10**
Net Cost of Terminal Area	$ 30,484	$ 26,713	$ 24,406	$ 23,723	$ 22,112	$ 22,280	$ 23,746	$ 42,587	$ 44,630	$ 44,912	$ 45,258
Less: ACAA Supplemental Gaming Revenue for Fixed BHS	-	-	-	-	-	-	-	(1,903)	(1,995)	(2,007)	(2,023)
Signatory Airline Terminal Rentals	$ 30,484	$ 26,713	$ 24,406	$ 23,723	$ 22,112	$ 22,280	$ 23,746	$ 40,684	$ 42,635	$ 42,905	$ 43,235
Non-signatory Rate at 120%	$ 175.11	$ 215.53	$ 193.83	$ 191.09	$ 177.40	$ 178.29	$ 190.02	$ 246.28	$ 258.09	$ 259.73	$ 261.73

1. PFCs Available for Debt Service include the expected allocation equal to 90% of the PFCs in excess of PFC-supported debt service (see Exhibit B).
2. Formula changes in 2020 per New AOA.
3. Starting in 2020 under the New AOA, includes parking, rental car revenues, and other ground transportation revenues.
Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit E-2
CALCULATION OF LANDING FEE RATE
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except for rates)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Airfield Costs											
O&M Expenses	$ 21,504	$ 23,839	$ 24,408	$ 25,462	$ 26,637	$ 27,845	$ 28,541	$ 29,255	$ 29,986	$ 30,736	$ 31,504
Debt Service:											
Prior Bonds/Deicing Bonds	310	357	-	-	-	-	-	-	-	-	-
Fund Deposit Requirements											
Equipment & Outlay Fund	1,542	1,730	1,723	1,747	1,791	1,836	1,882	1,929	1,977	2,026	2,077
O & M Reserve Fund	81	96	46	100	228	174	116	(871)	122	125	128
Renewal & Replacement Fund	-	-	-	-	-	-	-	-	-	-	-
Net Cost (Revenues) of Allegheny County Airport (incl CARES)	35	-	(266)	113	112	329	351	265	400	426	453
Coverage Requirement	-	-	-	-	-	-	-	-	-	-	-
Airport System Capital Fund	3,272	3,333	-	2,434	1,504	1,550	1,596	2,500	2,575	2,652	2,732
Total Airfield Operating Requirement	$ 26,743	$ 29,354	$ 25,912	$ 29,857	$ 30,273	$ 31,734	$ 32,486	$ 33,077	$ 35,060	$ 35,966	$ 36,894
PFC Revenues Allocable to Airfield Area	(3,456)	-	-	-	-	-	-	-	-	-	-
CARES, CRRSA, ARPA (PIT)	-	-	(2,542)	(5,500)	(2,090)	(975)	(418)	-	-	-	-
CARES (County)			(173)								
FEMA			(38)								
Natural Gas Revenues	-	(3,365)	-	-	-	-	-	-	-	-	-
Gaming Revenues	-	(1,730)	-	-	-	-	-	-	-	-	-
Parking Fees			(943)	(430)	(569)	(625)	(657)	(679)	(701)	(724)	(748)
Non-Airline Revenues Allocable to Airfield Area[1]	(4,232)	(2,934)	(10,842)	(10,103)	(9,744)	(9,859)	(9,967)	(10,485)	(10,155)	(10,269)	(10,385)
Airfield Requirement	$ 19,054	$ 21,325	$ 11,374	$ 13,824	$ 17,869	$ 20,275	$ 21,443	$ 21,913	$ 24,204	$ 24,973	$ 25,761
Adjustments											
Net Cost (Revenues) of Hangar and Field Support Area	$ (4,567)	$ (4,628)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Cost (Revenues) of Military Facilities	(165)	(166)	-	-	-	-	-	-	-	-	-
50% of Net Cost (Revenues) of Cargo Area	(78)	58	-	-	-	-	-	-	-	-	-
50% of Net Cost (Revenues) of Airport Development Area	(678)	(559)	-	-	-	-	-	-	-	-	-
	$ (5,489)	$ (5,296)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Net Airfield Cost	$ 13,565	$ 16,029	$ 11,374	$ 13,824	$ 17,869	$ 20,275	$ 21,443	$ 21,913	$ 24,204	$ 24,973	$ 25,761
Landed Weight of Signatory Passenger Airlines - New AOA	5,348	5,426	3,070	3,628	4,760	5,223	5,495	5,676	5,790	5,905	6,023
Landed Weight of Cargo Carriers	493	541	537	669	679	690	700	710	721	732	743
Adjusted Cargo Carrier Weight Premium @ 10%	49	54	54	67	68	69	70	71	72	73	74
Landed Weight of Non-signatory Passenger Airlines			97	145	230	253	266	275	280	286	291
Adjusted Non-signatory Weight Premium @ 20%			19	29	46	51	53	55	56	57	58
Landed Weight for Residual Calculation	5,890	6,021	3,776	4,538	5,784	6,285	6,584	6,787	6,919	7,053	7,190
Signatory Passenger Airline Landing Fee Rate	**$2.30**	**$2.66**	**$3.01**	**$3.05**	**$3.09**	**$3.23**	**$3.26**	**$3.23**	**$3.50**	**$3.54**	**$3.58**
Cargo Carrier Landing Fee Rate	**$2.53**	**$2.93**	**$3.31**	**$3.35**	**$3.40**	**$3.55**	**$3.58**	**$3.55**	**$3.85**	**$3.89**	**$3.94**
Non-signatory Rate at 120%	$2.76	$3.19	$3.61	$3.66	$3.71	$3.87	$3.91	$3.87	$4.20	$4.25	$4.30
Landing Fees											
Signatory Passenger Airlines	$ 12,315	$ 14,444	$ 9,247	$ 11,053	$ 14,706	$ 16,850	$ 17,897	$ 18,326	$ 20,253	$ 20,908	$ 21,580
Non-Signatory Passenger Airlines	-	-	349	528	854	979	1,039	1,064	1,176	1,214	1,253
Total Passenger Airlines	$ 12,315	$ 14,444	$ 9,595	$ 11,581	$ 15,560	$ 17,828	$ 18,936	$ 19,390	$ 21,430	$ 22,122	$ 22,833
Signatory Cargo Carriers	1,250	1,585	1,779	2,243	2,309	2,447	2,507	2,523	2,775	2,850	2,928
Total Landing Fees	$ 13,565	$ 16,029	$ 11,374	$ 13,824	$ 17,869	$ 20,275	$ 21,443	$ 21,913	$ 24,204	$ 24,973	$ 25,761

1. Reflects changed definition of Airfield cost center in 2020.
2. Effective in 2019 the cargo landing fee is equal to 110% of the Signatory rate.
Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit E-3
PASSENGER AIRLINE COST PER ENPLANED PASSENGER
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except for rates)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Passenger Signatory Airline Landing Fees	$ 11,918	$ 12,315	$ 14,444	$ 9,595	$ 11,581	$ 15,560	$ 17,828	$ 18,936	$ 19,390	$ 21,430	$ 22,122	$ 22,833
Non-Signatory Passenger Landing Fees	1,287	1,289	674									
Terminal Space Rentals	39,967	30,484	26,713	24,406	23,723	22,112	22,280	23,746	42,587	44,630	44,912	45,258
Less: ACAA Supplemental Discretionary Revenue[1]	-	-	-	-	-	-	-	-	(1,903)	(1,995)	(2,007)	(2,023)
Less: Republic Airlines Rent[2]	-	-	-	(358)	(271)	(252)	(253)	(270)	(454)	(476)	(479)	(483)
Non-signatory Space Rent	194	345	300	-	-	-	-	-	-	-	-	-
Ramp Rent	850	743	790	880	892	915	937	961	1,100	1,128	1,156	1,185
Less: Airline Waivers			(1,435)	(524)	-	-	-	-	-	-	-	-
Aircraft Parking Fees	367	454	625	943	430	569	625	657	679	701	724	748
Gate & FIS Use Charges	2,888	4,215	4,730	2,276	2,827	2,811	4,137	4,373	4,320	4,482	4,542	4,606
Total Payments	$ 57,470	$ 49,846	$ 46,842	$ 37,219	$ 39,182	$ 41,715	$ 45,555	$ 48,403	$ 65,718	$ 69,900	$ 70,970	$ 72,125
Enplaned Passengers	4,473	4,810	4,875	1,812	3,070	4,266	4,680	4,924	5,086	5,188	5,292	5,397
Cost per Enplaned Passenger	$ 12.85	$ 10.36	$ 9.61	$ 20.54	$ 12.76	$ 9.78	$ 9.73	$ 9.83	$ 12.92	$ 13.47	$ 13.41	$ 13.36
Cost per Enplaned Passenger (including non-scheduled)	$ 12.78	$ 10.31	$ 9.59									
Additional Passenger Airline Payments												
Tenant Finishes	$ 2,658	$ 715	$ 425	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Aircraft Support Charges	1,093	311	212	-	-	-	-	-	-	-	-	-
Special Automated Baggage System	7,130	2,647	2,718	2,773	2,639	2,609	2,674	2,741	-	-	-	-
Additional Passenger Airline Payments	$ 10,882	$ 3,673	$ 3,356	$ 2,773	$ 2,639	$ 2,609	$ 2,674	$ 2,741	$ -	$ -	$ -	$ -
Enplaned Passengers	4,473	4,810	4,875	1,812	3,070	4,266	4,680	4,924	5,086	5,188	5,292	5,397
Cost per Enplaned Passenger	$ 2.43	$ 0.76	$ 0.69	$ 1.53	$ 0.86	$ 0.61	$ 0.57	$ 0.56	$ -	$ -	$ -	$ -
Total Airline Payments with Tenant Finishes	$ 68,351	$ 53,519	$ 50,197	$ 39,993	$ 41,821	$ 44,324	$ 48,229	$ 51,144	$ 65,718	$ 69,900	$ 70,970	$ 72,125
CPE w/ Additional Payments	$ 15.28	$ 11.13	$ 10.30	$ 22.07	$ 13.62	$ 10.39	$ 10.31	$ 10.39	$ 12.92	$ 13.47	$ 13.41	$ 13.36

1. Additional ACAA Discretionary Revenue commitment for fixed portion of baggage handling fees.
2. Republic has been a Signatory Airline that leases terminal space for handling its operations as an affilate carrier for a number of airlines. It will no longer be a Signatory Airline under the new AOA.
Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit F
APPLICATION OF REVENUES
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except as noted)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority management. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

	Projection				DBO			
	2021	2022	2023	2024	2025	2026	2027	2028
Airline Rates and Charges	$ 44,335	$ 46,884	$ 50,929	$ 53,921	$ 68,696	$ 73,151	$ 74,299	$ 75,535
Nonairline Revenues	67,258	78,355	84,335	88,262	97,749	99,215	101,207	102,605
Other Pledged Revenues								
CARES/CRRSA/ARPA (PIT/AGC)	25,000	9,500	6,500	4,184	-	-	-	-
CARES (County)	57	148	-	-	-	-	-	-
FEMA Grant	-	-	-	-	-	-	-	-
Discretionary (Gas) Revenues	-	-	-	-	5,300	5,300	5,300	5,300
Discretionary (Gaming) Revenues	-	-	-	-	4,297	4,205	4,192	4,177
Supplemental Gaming Revenues for BHS	-	-	-	-	1,903	1,995	2,007	2,023
Total Revenues and Other Pledged Revenues	$ 136,650	$ 134,888	$ 141,764	$ 146,368	$ 177,945	$ 183,865	$ 187,006	$ 189,640
Application of Revenues								
(1) O&M Expenses	$ 106,905	$ 112,701	$ 117,082	$ 120,009	$ 101,813	$ 104,359	$ 106,968	$ 109,642
(2) Senior Debt Service Fund	-	-	-	-	84,542	84,548	84,545	84,549
Less: PFCs Available for Debt Service	-	-	-	-	(19,945)	(20,311)	(20,683)	(21,064)
(3) Operation and Maintenance Reserve Fund	420	966	730	488	(3,033)	424	435	446
(4) Senior Debt Service Reserve Fund	-	-	-	-	-	-	-	-
(5) Renewal and Replacement Fund	1,500	1,500	-	-	-	-	-	-
(6) Subordinate Lien Bond Fund	-	-	-	-	-	-	-	-
(7) Equipment and Capital Outlay Fund	3,042	3,118	3,196	3,276	3,358	3,442	3,528	3,616
(8) Airport System Capital Fund								
(i) Coverage Account	-	-	-	-	-	-	-	-
(ii) Restricted 1	-	-	-	-	-	-	-	-
(iii) Restricted 2	-	-	-	-	-	-	-	-
(iv) Discretionary 1 / ASCF Deposit Requirement	9,738	10,030	10,331	10,640	5,000	5,150	5,305	5,464
(v) Discretionary 2 / Concession Incentive Fee	2,633	3,288	3,613	3,818	4,196	4,256	4,319	4,380
(vi) Repayment of ACAA Loan	11,211	2,491	4,983	6,229	-	-	-	-
(vii) ACAA Area Net Remaining Revenues	1,201	793	1,830	1,909	2,014	1,996	2,591	2,608
Total Application of Revenues	$ 136,650	$ 134,888	$ 141,764	$ 146,368	$ 177,945	$ 183,865	$ 187,006	$ 189,640

Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

Exhibit G
DEBT SERVICE COVERAGE
Allegheny County Airport Authority
(for the 12 months ending December 31; numbers in thousands except for rates)

exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Authority gement. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecasts, and the variations could be material.

`	Projection 2021	2022	2023	2024	DBO 2025	2026	2027	2028
Revenues and Other Pledged Revenues	$ 136,650	$ 134,888	$ 141,764	$ 146,368	$ 177,945	$ 183,865	$ 187,006	$ 189,640
Operation & Maintenance Expenses	(106,905)	(112,701)	(117,082)	(120,009)	(101,813)	(104,359)	(106,968)	(109,642)
Net Revenues	$ 29,745	$ 22,187	$ 24,683	$ 26,359	$ 76,132	$ 79,506	$ 80,038	$ 79,998
Coverage Amount	-	-	-	-	16,149	16,059	15,965	15,871
Total Available	$ 29,745	$ 22,187	$ 24,683	$ 26,359	$ 92,281	$ 95,566	$ 96,003	$ 95,869
Debt Service								
Senior Bonds	-	-	-	-	$ 84,542	$ 84,548	$ 84,545	$ 84,549
Less: PFCs Available for Debt Service	-	-	-	-	(19,945)	(20,311)	(20,683)	(21,064)
Aggregate Annual Debt Service	-	-	-	-	$ 64,596	$ 64,237	$ 63,861	$ 63,485
Subordinate Obligation Debt Service[1]	-	-	-	-	-	-	-	-
Total Debt Service	-	-	-	-	64,596	64,237	63,861	63,485
Debt Service Coverage With Coverage Account								
Senior Bonds	-	-	-	-	1.43	1.49	1.50	1.51
Senior Bonds and Subordinate Obligations	-	-	-	-	1.43	1.49	1.50	1.51
Debt Service Coverage Without Coverage Account								
Senior Bonds	-	-	-	-	1.18	1.24	1.25	1.26
Senior Bonds and Subordinate Obligations	-	-	-	-	1.18	1.24	1.25	1.26

1. Excludes interest expense on the revolving PNC Line of Credit, which is expected to be paid from Bonds when issued.

Sources: Historical: Allegheny County Airport Authority; Projection: LeighFisher, July 2021.

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APPENDIX C

FORM OF MASTER INDENTURE

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EXECUTION COPY

MASTER TRUST INDENTURE

by and between

THE ALLEGHENY COUNTY AIRPORT AUTHORITY

and

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Trustee

Dated as of December 1, 2019

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MASTER TRUST INDENTURE

THIS MASTER TRUST INDENTURE (this "***Indenture***"), dated as of December 1, 2019, is by and between **ALLEGHENY COUNTY AIRPORT AUTHORITY,** (the "***Authority***"), a body corporate and politic organized and existing under the laws of the Commonwealth of Pennsylvania, having its principal office in the County of Allegheny, and **THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.**, a national banking association duly formed, existing and qualified to accept and administer trusts of the character herein set out under and by virtue of the laws of the United States of America, as Trustee under this Indenture (said trustee and any successor trustee under this Indenture being hereinafter called the "***Trustee***").

RECITALS

WHEREAS, the Authority is a body corporate and politic under the laws of the Commonwealth of Pennsylvania, organized by the County of Allegheny pursuant to the Municipality Authorities Act, approved June 19, 2001, P.L. 287, Act 22, as amended, 53 Pa.C.S. Section 5601 *et seq*. (the "***Act***").

WHEREAS, the Authority and Wells Fargo, N.A. (as successor to National City Bank of Pennsylvania) entered into a Trust Indenture dated as of January 1, 1999, as amended and supplemented by the First Supplemental Indenture dated as of July 1, 2001, the Second Supplemental Indenture dated as of July 15, 2001, the Amended and Restated Third Supplemental and Amending Indenture dated as of November 1, 2006, the Fourth Supplemental Indenture dated as of October 1, 2007, the Fifth Supplemental Indenture dated as of September 1, 2010, the Sixth Supplemental Indenture dated as of May 1, 2012, and the Seventh Supplemental Indenture dated as of January 1, 2019 (collectively the "***Prior Indenture***").

WHEREAS the Authority pursuant to the Prior Indenture issued airport system revenue bonds in several series (the "***Prior Bonds***") to pay the costs and expenses of designing and constructing certain capital projects within the Airport System (as such term is herein defined);

WHEREAS, pursuant to the Prior Indenture, the Authority has taken all steps to provide for the defeasance of all of the Prior Bonds, and all rights, title and interest of the trustee under the Prior Indenture for such defeased Bonds have ceased;

WHEREAS, the Authority desires to pledge Net Revenues pursuant to this Indenture to finance or refinance the Costs of certain Airport Facilities located within the Airport System (as such terms are herein defined); and the Trustee agrees to accept and administer the trust created hereby;

NOW, THEREFORE, the Authority and the Trustee agree as follows, each for the benefit of the other and/or the benefit of Holders of the Bonds secured by this Indenture:

GRANTING CLAUSE

To secure the payment of the principal of, premium, if any, and interest on the Bonds and the performance and observance by the Authority of all the covenants, agreements and conditions expressed or implied herein or contained in the Bonds, the Authority hereby pledges and assigns to the Trustee and grants to the Trustee a lien on and security interest in all right, title and interest of the Authority in and to all of the following and provides that such lien and security interest shall be prior in right to any other pledge, lien or security interest created by the Authority in the following: (a) the Net Revenues, (b) except as otherwise provided in this Indenture and any Supplemental Indenture, all moneys and securities (excluding moneys and securities on deposit in any Rebate Fund) held from time to time by the Trustee under this Indenture, and to the extent provided in any Supplemental Indenture moneys and securities held in any Construction Fund whether or not held by the Trustee, (c) earnings on amounts included in clauses (a) and (b) of this Granting Clause (except to the extent excluded from the definition of "Revenues"), and (d) any and all other funds, assets, rights, property or interests therein, of every kind or description which may from time to time hereafter, by delivery or by writing of any kind, be sold, transferred, conveyed, assigned, pledged, irrevocably committed, granted or delivered to or deposited with the Trustee as additional security hereunder, for the equal and proportionate benefit and security of all Bonds, all of which, regardless of the time or times of their authentication and delivery or maturity, shall, with respect to the security provided by this Granting Clause, be of equal rank without preference, priority or distinction as to any Bond over any other Bond or Bonds, except as to the timing of payment of the Bonds.

The Debt Service Reserve Fund, which may contain a Common Debt Service Reserve Account and one or more Series Debt Service Reserve Accounts therein, and any Debt Service Reserve Fund Surety Policy, as hereinafter defined, provided at any time in satisfaction of all or a portion of the Reserve Requirement and any other security, Liquidity Facility or Credit Facility provided for specific Bonds, a specific Series of Bonds or one or more Series of Bonds may, as provided by a Supplemental Indenture, secure only such specific Bonds, Series of Bonds or one or more Series of Bonds and, therefore, shall not be included as security for all Bonds under this Indenture unless otherwise provided by a Supplemental Indenture and moneys and securities held in trust as provided in Section 4.15 hereof exclusively for Bonds which have become due and payable and moneys and securities which are held exclusively to pay Bonds which are deemed to have been paid under Article VII hereof shall be held solely for the payment of such specific Bonds.

ARTICLE I

DEFINITIONS; INTERPRETATION

The capitalized terms used in this Indenture and in any Supplemental Indenture shall, for all purposes of this Indenture, have the meanings specified in this Article I, unless a different definition is given such term in said Supplemental Indenture or unless the context clearly requires otherwise.

"*Account*" shall mean any account established pursuant to this Indenture or any Supplemental Indenture.

"*Accreted Value*" shall mean with respect to any Capital Appreciation Bonds, as of any date of calculation, the sum of the amount set forth in a Supplemental Indenture as the amount representing the initial principal amount of such Capital Appreciation Bond plus the interest accumulated, compounded and unpaid thereon as of the most recent compounding date; provided the Accreted Value shall be determined in accordance with the provisions of the Supplemental Indenture authorizing the issuance of such Capital Appreciation Bond. All references herein to "principal" shall include Accreted Value, as applicable.

"*Act*" shall mean the Municipality Authorities Act, approved June 19, 2001, P.L. 287, Act 22, as amended, 53 Pa.C.S. Section 5601 *et seq*., and all laws amendatory thereof or supplemental thereto.

"*Aggregate Annual Debt Service*" shall mean, for any Fiscal Year or other applicable period, the aggregate amount of Annual Debt Service on all Outstanding Bonds calculated as described in Section 2.11(c) hereof.

"*Aggregate Annual Debt Service For Reserve Requirement*" shall mean the computation of Aggregate Annual Debt Service with respect to all Outstanding Bonds participating in the Common Debt Service Reserve Account contained in the Debt Service Reserve Fund in current or any future Fiscal Year, with such modifications in the assumptions thereof as is described in this definition. For purposes of determining the Aggregate Annual Debt Service For Reserve Requirement, the annual debt service with respect to any Series of Balloon Indebtedness, Tender Indebtedness or Variable Rate Indebtedness shall, upon the issuance of such Series, be calculated on the basis of the assumptions set forth in clauses (ii), (iii), (iv), or (v) of Section 2.11(c) hereof, respectively, and the amount so determined shall not require adjustment thereafter except as appropriate to reflect reductions in the outstanding principal amount of such Series.

"*Airline Operating Agreements*" shall mean, collectively, each Airline Operating Agreement for Pittsburgh International Airport, between the Authority and each airline named therein, as from time to time amended and supplemented, and any substitute agreement or any other document, ordinance or resolution governing the use of the Airport System by the airlines.

"*Airport Facilities*" or "*Airport Facility*" shall mean a facility or group of facilities or category of facilities which constitute or are part of the Airport System.

"*Airport System*" shall mean all airports, airport sites, and all equipment, accommodations and facilities for aerial navigation, flight, instruction and commerce now or hereafter under the jurisdiction and control of the Authority, including Pittsburgh International Airport located in the Townships of Findlay and Moon, Pennsylvania, and the Allegheny County Airport located in West Mifflin Township, Pennsylvania, and any successor entities thereto (including the County), including all facilities and property related thereto, real or personal, under the jurisdiction or control of the Authority or in which the Authority has other rights or from which the Authority derives revenues at such location, whether or not directly related to the air transportation of people and goods; and including or excluding, as the case may be, such property as the Authority may either acquire or which shall be placed under its control, or divest or have removed from its control.

"*Airport System Capital Fund*" shall mean the "Airport System Capital Fund" created, held and maintained by the Authority for the purpose described in Section 4.12 hereof.

"*Annual Debt Service*" shall mean, with respect to any Bond, the aggregate amount required to be on deposit in the respective Debt Service Fund or such other Fund or Account during the Fiscal Year to satisfy the funding requirements for the payment of principal and interest with respect to the Bonds, plus any amount payable by the Authority (or the Trustee) under a Qualified Swap in accordance with the terms thereof, less any amount to be received by the Authority from a Qualified Swap Provider pursuant to a Qualified Swap. For purposes of clarity, principal and interest payments made on January 1 shall be considered part of the Annual Debt Service in the prior Fiscal Year.

"*Authority*" shall mean Allegheny County Airport Authority, a body corporate and politic under the Act, and any successor to its function as operator of the Airport System. Any action required or authorized to be taken by the Authority in this Indenture may be taken by an Authorized Authority Representative with such formal approvals by the Authority as are required by the policies and practices of the Authority and applicable laws; provided, however, that any action taken by an Authorized Authority Representative in accordance with the provisions of this Indenture shall conclusively be deemed by the Trustee and the Owners, as applicable, to be the act of the Authority without further evidence of the authorization thereof by the Authority.

"*Authority Attorney*" shall mean the Authority's Solicitor or designee, or such other person authorized to perform the duties of the Authority Attorney.

"*Authorized Authority Representative*" shall mean the Chief Executive Officer, the Chief Financial Officer, the Chairman of the Authority, the Secretary of the Authority or such other officer or employee of the Authority or other person which other officer, employee or person has been designated by the Chief Executive Officer or Chief Financial Officer as an Authorized Authority Representative by written notice delivered by the Chief Executive Officer or Chief Financial Officer to the Trustee.

"*Authority Secretary*" shall mean the Secretary of the Authority or such other title as the Authority may from time to time assign for such position, or in the event of his or her disability or absence, an assistant secretary of the Authority or other person duly authorized to perform the duties of the Authority Secretary.

"*Balloon Indebtedness*" shall mean, with respect to any Series of Bonds 25% or more of the principal of which matures on the same date or within a Fiscal Year, that portion of such Series which matures on such date or within such Fiscal Year; provided, however, that to constitute Balloon Indebtedness (a) the Authority must designate that portion of such Series of Bonds as Balloon Indebtedness, and (b) the amount of Bonds of a Series maturing on a single date or within a Fiscal Year must equal or exceed 150% of the amount of such Series which matures during any other Fiscal Year. For purposes of this definition, the principal amount maturing on any date shall be reduced by the amount of such Bonds scheduled to be amortized by prepayment or redemption prior to their stated maturity date. Commercial Paper shall not be considered to be Balloon Indebtedness.

"*Board* " shall mean Board of Directors of the Authority, or any other governing body of the Authority hereafter provided the Act.

"*Bond*" or "*Bonds*" shall mean any debt obligation of the Authority issued under and in accordance with the provisions of Article II hereof, including, but not limited to, bonds, notes, bond anticipation notes, Commercial Paper, revolving lines of credit and other instruments creating an indebtedness of the Authority, obligations incurred pursuant to an any interest rate swap agreement entered into in connection with Bonds, obligations incurred through lease or installment purchase agreements or other agreements or certificates of participation therein, and Repayment Obligations to the extent provided in Section 2.13 hereof. The term "Bond" or "Bonds" does not include any Subordinate Obligation; provided, however, the Authority may provide in a Supplemental Indenture that Subordinate Obligations may be thenceforth issued pursuant to this Indenture having the terms applicable to the Bonds, except that such Subordinate Obligations shall be secured by a pledge of and lien on and payable from Revenues remaining after the deposits to the Funds, Accounts and Subaccounts set forth in Section 4.03(b)(i) through (iii) hereof.

"*Bond Counsel*" shall mean a firm or firms of attorneys which are nationally recognized as experts in the area of municipal finance and which are familiar with the transactions contemplated under this Indenture and which are acceptable to the Authority.

"*Bondholder*," "*Holder*," "*holder*," "*Owner*," "*owner*" or "*registered owner*" shall mean the person in whose name any Bond or Bonds are registered on the books maintained by the Registrar and shall include any Credit Provider or Liquidity Provider to which a Repayment Obligation is then owed, to the extent that such Repayment Obligation is deemed to be a Bond under the provisions of Section 2.12 hereof.

"*Book-Entry Bonds*" means those Bonds held by DTC (or its nominee) as the Bondholder thereof pursuant to the terms and provisions of Section 2.06 hereof.

"*Business Day*" shall mean a day on which banks located in New York, New York, in Pittsburgh, Pennsylvania, and in the city in which the principal corporate trust office of the Trustee is located are open, provided that such term may have a different meaning for any specified Series of Bonds if so provided by a Supplemental Indenture. For purposes of payments and other actions relating to security or liquidity enhanced Bonds, "*Business Day*" shall mean a day upon which any Credit Provider or Liquidity Provider at which demands for payment under the Credit Facility or Liquidity Facility are to be presented is authorized to be open.

"*Capital Appreciation Bonds*" shall mean Bonds all or a portion of the interest on which is compounded and accumulated at the rates and on the dates set forth in a Supplemental Indenture and is payable only upon redemption or on the maturity date of such Bonds. Bonds which are issued as Capital Appreciation Bonds, but later convert to Bonds on which interest is paid periodically shall be Capital Appreciation Bonds until the conversion date and from and after such conversion date shall no longer be Capital Appreciation Bonds, but shall be treated as having a principal amount equal to their Accreted Value on the conversion date.

"*Capitalized Interest*" shall mean proceeds of Bonds or other monies not included in Revenues that are deposited with the Trustee in a capitalized interest account or the Debt Service Fund as shall be described in a Supplemental Indenture upon issuance of such Bonds that are to be used to pay interest on Bonds.

"*Cede & Co*." means Cede & Co., the nominee of DTC, and any successor nominee of DTC with respect to the Bonds.

"*Chief Executive Officer*" shall mean the Chief Executive Officer of the Authority or such other title as the Authority may from time to time assign for such position or such other person duly authorized to perform the duties of the Chief Executive Officer.

"*Chief Financial Officer*" shall mean the Chief Financial Officer of the Authority or such other title as the Authority may from time to time assign for such position or such other person duly authorized to perform the duties of the Chief Financial Officer.

"*Code*" shall mean the Internal Revenue Code of 1986, as amended, and the United States Treasury Regulations applicable with respect thereto.

"*Commercial Paper*" shall mean debt obligations of the Authority authorized by the Authority to be incurred through the issuance, from time to time, of taxable or tax-exempt notes of the Authority under and in accordance with the provisions of Article II hereof, with maturities of not to exceed 270 days. The term "Commercial Paper" does not include any notes issued as Subordinate Obligations.

"*Common Debt Service Reserve Account*" shall mean an Account contained in the Debt Service Reserve Fund (other than the Series Debt Service Reserve Account or Accounts) created by the Authority pursuant to a Supplemental Indenture in connection with the issuance of any Series of Bonds and that is required to be funded for the purpose of providing security for such Series of Bonds and under certain circumstances to provide additional security for such other designated Series of Bonds issued pursuant to the terms of this Indenture and as specified in any Supplemental Indenture.

"*Commonwealth*" shall mean the Commonwealth of Pennsylvania.

"*Completion Bonds*" shall mean Bonds issued to pay costs of completing a Project for which Bonds have previously been issued provided that the principal amount of such Bonds being issued for completion purposes does not exceed an amount equal to 15% of the principal amount of the Bonds originally issued for such Project and the proceeds of such Completion Bonds are reasonably allocable to the Project to be completed.

"*Construction Fund*" shall mean any Construction Fund created in accordance with Section 4.13 hereof.

"*Consultant*" shall mean any Independent consultant, consulting firm, engineer, architect, engineering firm, architectural firm, accountant or accounting firm, financial advisory or investment banking firm, experts in the area of air traffic and airport financial analysis, or other expert recognized to be well-qualified for work of the character required and retained by the Authority to perform acts and carry out the duties provided for such consultant in this Indenture.

"*Costs*" or "*Costs of the Project*" shall mean all costs of planning, designing, developing, financing, constructing, installing, equipping, furnishing, improving, acquiring, enlarging and/or renovating a Project and placing the same in service and shall include, but not be limited to the following: (a) costs of real or personal property, rights, franchises, easements and other interests in property, real or personal, and the cost of demolishing or removing structures and site preparation, infrastructure development, and landscaping and acquisition of land to which structures may be removed; (b) the costs of materials and supplies, machinery, equipment, vehicles, rolling stock, furnishings, improvements and enhancements; (c) labor and related costs and the costs of services provided, including costs of consultants, advisors, architects, engineers, accountants, planners, attorneys, financial and feasibility consultants, in each case, whether an employee of the Authority or a Consultant; (d) costs of the Authority properly allocated to a Project and with respect to costs of its employees or other labor costs, including the cost of medical, pension, retirement and other benefits as well as salary and wages and the allocable costs of administrative, supervisory and managerial personnel and the properly allocable cost of benefits provided for such personnel; (e) financing expenses, including costs related to issuance of and securing of Bonds, costs of Credit Facilities or Liquidity Facilities, payment of interest on Bonds, deposits to any Common Debt Service Reserve Account or Series Debt Service Reserve Account, if any, Trustee's fees and expenses; (f) any Swap Termination Payments due in connection with a Series of Bonds or the failure to issue such Series of Bonds, (g) any other cost permitted under the Act, and (h) such other costs and expenses, including Capitalized Interest, that can be capitalized under Generally Accepted Accounting Principles in effect at the time the cost is incurred by the Authority.

"*County*" Allegheny County, Pennsylvania.

"*Coverage Account*" shall mean the "Coverage Account" created, held and maintained within the Revenue Fund pursuant to Section 4.10 hereof.

"*Coverage Amount*" shall mean the amount which may, in the Authority's discretion, be deposited in the Coverage Account in order for the Authority to have on deposit therein with respect to any Annual Debt Service due and payable in the current Fiscal Year on Outstanding Bonds, an amount not to exceed twenty-five percent (25%) of such Annual Debt Service.

"*Credit Facility*" shall mean a policy of municipal bond insurance, a letter of credit, surety bond, line of credit, guarantee, standby purchase agreement, Debt Service Reserve Fund Surety Policy or other financial instrument which obligates a third party to make payment of or provide funds to the Trustee for the payment of the principal of and/or interest on Bonds whether such obligation is to pay in the first instance and seek reimbursement or to pay only if the Authority fails to do so.

"*Credit Provider*" shall mean the party obligated to make payment of principal of and/or interest on the Bonds under a Credit Facility.

"*Customer Facility Charges*" or "*CFC*" shall mean the charge imposed by the Authority from time to time on customers of rental car companies operating at the Airport, and any interest, profits or other income derived from the investment thereof net of amounts that collecting entities are entitled to retain for collecting, handling, and remitting such CFC revenues (if any), all or a portion of which may be treated as Other Pledged Revenues as specified by the Authority.

"*Debt Service Fund*" or "*Debt Service Funds*" shall mean any Debt Service Fund or Debt Service Funds created by the Authority and held and maintained by the Trustee pursuant to Section 4.05 hereof.

"*Debt Service Reserve Fund*" shall mean the "Debt Service Reserve Fund" created by the Authority and held and maintained by the Trustee pursuant to Section 4.06 hereof; provided that the Debt Service Reserve Fund may contain a Common Debt Service Reserve Account and one or more Series Debt Service Reserve Accounts.

"*Debt Service Reserve Fund Surety Policy*" shall mean an insurance policy or surety bond, or a letter of credit, deposited with the Trustee for credit to the , Common Debt Service Reserve Account or a Series Debt Service Reserve Account contained in the Debt Service Reserve Fund, in lieu of or partial substitution for cash or securities on deposit therein. Except as otherwise provided in a Supplemental Indenture, the entity providing such Debt Service Reserve Fund Surety Policy shall be rated, at the time such instrument is provided, in one of the three highest long-term Rating Categories by one or more Rating Agencies.

"*Designated Debt*" shall mean a specific indebtedness, designated by the Authority, in which such debt shall be offset with a Swap, such specific indebtedness to include all or any part of a Series of Bonds.

"*DTC*" means The Depository Trust Company, a limited purpose trust company organized under the laws of the State of New York, and its successors and assigns.

"*Event of Default*" shall mean any occurrence or event specified in Section 8.01 hereof.

"*FAA*" shall mean the Federal Aviation Administration.

"*Federal Direct Payments*" shall mean amounts payable by the federal government to the Authority pursuant to Sections 54AA and 6431 of the Code, and any amendments thereto or any new or similar federal program providing payments or credits to the Authority, in connection with the Authority's issuance of Bonds or Subordinate Obligations, in lieu of any credit otherwise available to the bondholders of such Bonds or Subordinate Obligations.

"*Fiscal Year*" shall mean the fiscal year of the Authority ending as of December 31 of each year or such other date as the Authority designates as its fiscal year.

"*Fitch*" shall mean Fitch Ratings, Inc. and its successors and assigns, and, if Fitch Ratings Inc. shall for any reason no longer perform the functions of a nationally recognized statistical rating organization, "Fitch" shall be deemed to refer to any nationally recognized statistical rating organization designated by the Authority.

"*Force Majeure Event*" shall mean an occurrence that is beyond the control of the Authority or the Trustee and could not have been avoided by exercising due care and shall include acts of God, terrorism, war, riots, strikes, fire, floods, earthquakes, epidemics or other similar occurrences.

"*Fund*" shall mean any fund established pursuant to this Indenture or any Supplemental Indenture.

"*Gaming Revenues*" shall mean funds received by the Authority from the Commonwealth under the Pennsylvania Race Horse Development and Gaming Act, as amended and supplemented from time to time, all or a portion of which may be designated as Other Pledged Revenues as specified by the Authority.

"*Generally Accepted Accounting Principles*" or "*GAAP*" shall mean the accounting principles generally accepted in the United States applied on a consistent basis that are applicable to the circumstances as of the date of determination as set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants applicable to a government-owned airport applying all statements and interpretations issued by the Governmental Accounting Standards Board and, to the extent adopted by the Authority from time to time: (a) the statements and pronouncements of the Financial Accounting Standards Board; and (b) the statements and pronouncements of such other entity or entities as may be approved by a significant segment of the accounting profession.

"*Government Obligations*" shall mean (i) United States Obligations (including obligations issued or held in book-entry form), (ii) pre-refunded municipal obligations meeting the following conditions: (A) the municipal obligations are not subject to redemption prior to maturity, or the trustee has been given irrevocable instructions concerning their calling and redemption and the issuer has covenanted not to redeem such obligations other than as set forth in such instructions; (B) the municipal obligations are secured by cash and/or United States Obligations, which United States Obligations may be applied only to interest, principal and premium payments of such municipal obligations; (C) the principal of and interest on the United States Obligations (plus any cash in the escrow fund) are sufficient to meet the liabilities of the municipal obligations; (D) the United States Obligations serving as security for the municipal obligations are held by an escrow agent or trustee; (E) the United States Obligations are not available to satisfy any other claims, including those against the trustee or escrow agent; and (F) the municipal obligations are rated in their highest rating category by one or more of the Rating Agencies; and (iii) any other type of security or obligation which the Rating Agencies then maintaining ratings on the Bonds to be defeased have determined to be permitted defeasance securities.

"*Indenture*" shall mean this Master Trust Indenture, dated as of December 1, 2019, by and between the Authority and the Trustee, as amended from time to time.

"*Independent*" shall mean, when used with respect to any specified firm or individual, such a firm or individual who (a) does not have any direct financial interest or any material indirect financial interest in the operations of the Authority, other than the payment to be received under a contract for services to be performed, and (b) is not connected with the Authority as an official, officer or employee.

"*Initial Bonds*" shall mean, collectively, (a) the Allegheny County Airport Authority Airport Revenue Bonds, Series 2020A (AMT), and (b) the Allegheny County Airport Authority Airport Revenue Bonds, Series 2020B (Non-AMT).

"*Investment Agreement*" shall mean an investment agreement or guaranteed investment contract (i) with or guaranteed by a national or state chartered bank or savings and loan, an insurance company or other financial institution whose unsecured debt is rated in the highest short-term rating category (if the term of the Investment Agreement is less than three years) or in either of the two highest long-term Rating Categories (if the term of the Investment Agreement is three years or longer) by one or more of the Rating Agencies, or (ii) which investment agreement or guaranteed investment contract is fully secured by obligations described in clause (ii) or (iii) of the definition of Permitted Investments which are (A) valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to 103% of the principal amount of the investment, together with the interest accrued and unpaid thereon, (B) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (C) subject to a perfected first lien on behalf of the Trustee, and (D) free and clear from all third-party liens.

"*Kroll*" shall mean Kroll Bond Rating Agency, Inc. and its successors and assigns, and, if Kroll Bond Rating Agency, Inc. shall for any reason no longer perform the functions of a nationally recognized statistical rating organization, "Kroll" shall be deemed to refer to any nationally recognized statistical rating organization designated by the Authority.

"*Liquidity Facility*" shall mean a letter of credit, line of credit, standby purchase agreement or other financial instrument, including a Credit Facility, which is available to provide funds with which to purchase Bonds.

"*Liquidity Provider*" shall mean the entity which is obligated to provide funds to purchase Bonds under the terms of a Liquidity Facility.

"*Mail*" shall mean by first-class United States mail, postage prepaid.

"*Maximum Aggregate Annual Debt Service*" shall mean the maximum amount of Aggregate Annual Debt Service on all Outstanding Bonds in the current or any future Fiscal Year.

"*Maximum Aggregate Annual Debt Service For Reserve Requirement*" shall mean the computation of Maximum Aggregate Annual Debt Service with respect to all Outstanding Bonds participating in the Common Debt Service Reserve Account in the then current or any future Fiscal Year, with such modifications in the assumptions thereof as is described in this definition. For purposes of determining the Maximum Aggregate Annual Debt Service For Reserve Requirement, the annual debt service with respect to any Series of Balloon Indebtedness, Tender Indebtedness or Variable Rate Indebtedness shall, upon the issuance of such Series, be calculated on the basis of the assumptions set forth in clauses (ii), (iii), (iv) or (v) of Section 2.11(c) hereof, respectively, and the amount so determined shall not require adjustment thereafter except as appropriate to reflect reductions in the outstanding principal amount of such Series.

"*Moody's*" shall mean Moody's Investors Service, Inc. and its successors and assigns, and, if Moody's Investors Service, Inc. shall for any reason no longer perform the functions of a nationally recognized statistical rating organization, "Moody's" shall be deemed to refer to any nationally recognized statistical rating organization designated by the Authority.

"Natural Gas Revenues" shall mean all royalties, bonus payments, land rents and other payments made to the Authority by any lessee of mineral estates on lands in the Airport System, all or a portion of which may be designated as Other Pledged Revenues as specified by the Authority.

"*Net Revenues*" shall mean, for any given period, the Revenues for such period, less the Operation and Maintenance Expenses for such period.

"*Net Proceeds*" shall mean insurance proceeds received as a result of damage to or destruction of Airport Facilities or any condemnation award or amounts received by the Authority from the sale of Airport Facilities under the threat of condemnation less expenses (including attorneys' fees and expenses and any fees and expenses of the Trustee) incurred in the collection of such proceeds or award.

"*Notes*" shall mean Bonds issued under the provisions of Article II hereof which have a maturity of one year or less from their date of original issuance and which are not Commercial Paper.

"*Operation and Maintenance Expenses*" or "*O&M Expenses"* shall mean, for any given period, the reasonable and necessary costs paid by the Authority for maintaining and operating the Airport System as determined in accordance with Generally Accepted Accounting Principles as in effect from time to time; including any costs of Credit Facilities and Liquidity Facilities; but excluding depreciation expense, any principal or interest payment in respect of capital leases or indebtedness including the Bonds, any costs of issuance relating to any capital leases or indebtedness including the Bonds, amortization or intangibles, any non-cash pension and other postemployment benefits (OPEB) obligations or liabilities (except to the extent required to be cash funded by the Commonwealth or the County), any Swap Termination Payments, and any operation and maintenance expenses of the Airport System payable from moneys other than Revenues (including, but not limited to, any non-cash items that are required to be treated as operation and maintenance expenses of the Airport System in accordance with Generally Accepted Accounting Principles). Operation and Maintenance Expenses shall not include any operation and maintenance costs and expenses pertaining to Special Facilities or expenses incurred by any lessee under a Special Facility Agreement.

"*Operation and Maintenance Reserve Account*" shall mean the "Operation and Maintenance Reserve Account" created, held and maintained within the Operation and Maintenance Fund pursuant to Section 4.07 hereof.

"*Operation and Maintenance Reserve Account Requirement*" or "*O&M Reserve Requirement"* shall mean, as of any date of calculation, an amount equal to at least one-sixth

(1/6) of the current annual budget of the Authority for Operation and Maintenance Expenses or such other greater amount that the Authority determines, in its sole discretion, to be the requirement hereunder, provided that such amount does not violate the provisions of this Indenture, or the provisions of any other contracts or agreements of the Authority or any legal requirements otherwise applicable to this provision.

"*Operation and Maintenance Fund*" shall mean the "Operation and Maintenance Fund" created, held and maintained by the Authority pursuant to Section 4.04 hereof.

"*Other Pledged Revenues*" shall mean moneys, not constituting Revenues, that are designated, for any period, as "Other Pledged Revenues" pursuant to Section 4.18 hereof. Other Pledged Revenues may include, but are not limited to, moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 hereof, all or a portion of Customer Facility Charges, Gaming Revenues, and Natural Gas Revenues; however, PFCs Available for Debt Service may not be designated as or constitute "Other Pledged Revenues."[1]

"*Outstanding*" when used with respect to Bonds shall mean all Bonds which have been authenticated and delivered under this Indenture, except:

(a) Bonds cancelled or purchased by the Trustee for cancellation or delivered to or acquired by the Trustee for cancellation and, in all cases, with the intent to extinguish the debt represented thereby;

(b) Bonds deemed to be paid in accordance with Article VII hereof;

(c) Bonds in lieu of which other Bonds have been authenticated under Section 2.05 or 2.07 hereof;

(d) Bonds that have become due (at maturity or on redemption or otherwise) and for the payment of which sufficient moneys, including interest accrued to the due date, are held by the Trustee, a Paying Agent or such other fiduciary or agent;

(e) Bonds which, under the terms of the Supplemental Indenture pursuant to which they were issued, are deemed to be no longer Outstanding;

(f) Repayment Obligations deemed to be Bonds under Section 2.13 hereof to the extent such Repayment Obligation arose under the terms of a Credit Facility or a Liquidity Facility and are secured by a pledge of Outstanding Bonds acquired by the Credit Provider or the Liquidity Provider; and

(g) for purposes of any consent or other action to be taken by the holders of a specified percentage of Bonds under this Indenture, Bonds held by or for the account of

[1] For a description of the amendment to the definition of "*Other Pledged Revenues*" made by the Second Supplemental Indenture, to become effective upon the issuance of the Series 2021 Bonds, see "AMENDMENTS TO THE MASTER INDENTURE."

the Authority or by any person controlling, controlled by or under common control with the Authority, unless such Bonds are pledged to secure a debt to an unrelated party.

"*Participants*" means the participants of DTC which include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations.

"*Passenger Facility Charges*" or "*PFCs*" shall mean charges collected by the Authority pursuant to the authority granted by the Aviation Safety and Capacity Expansion Act of 1990 (49 U.S.C. Section 40117), and 14 CFR Part 158, as amended from time to time, in respect of any component of the Airport System and interest earnings thereon, net of amounts that collecting air carriers are entitled to retain for collecting, handling and remitting such passenger facility charge revenues.

"*PFCs Available for Debt Service*" shall mean Passenger Facility Charges made available to pay debt service on one or more Series of Bonds during any period pursuant to Section 4.17 hereof.

"*Paying Agent*" or "*Paying Agents*" shall mean, with respect to the Bonds or any Series of Bonds, the banks, trust companies, other financial institutions or other entities designated in a Supplemental Indenture or a resolution of the Authority as the place where such Bonds shall be payable and which bank, trust company, other financial institution or other entity has accepted the position in accordance with Section 9.11 hereof.

"*Payment Date*" shall mean, with respect to any Bonds, each date on which interest is due and payable thereon and each date on which principal is due and payable thereon whether by maturity or redemption thereof.

"*Permitted Investments*" shall mean any of the following, but only to the extent permitted by the laws of the Commonwealth and the Authority's investment policy:

(i) United States Obligations;

(ii) Obligations, debentures, notes or other evidences of indebtedness issued or guaranteed by any of the following instrumentalities or agencies of the United States of America: Federal Home Loan Bank System; Government National Mortgage Association; Federal National Mortgage Association; Federal Farm Credit Bureau; Farmers Home Administration; Federal Home Loan Mortgage Corporation; and Federal Housing Administration;

(iii) Direct and general long-term obligations of any state, which obligations are rated at all times in one of the two highest Rating Categories by one or more of the Rating Agencies;

(iv) Direct and general short-term obligations of any state which obligations are rated at all times in the highest Rating Category by one or more of the Rating Agencies;

(v) Interest-bearing demand or time deposits (including certificates of deposit) or interests in money market portfolios issued by state banks or trust companies or national banking associations that are members of the Federal Deposit Insurance Corporation ("***FDIC***") or by savings and loan associations that are members of the FDIC, which deposits or interests must either be (A) continuously and fully insured by FDIC and with banks that are rated at all times at least in the highest short-term Rating Category by one or more of the Rating Agencies or is rated at all times in one of the two highest long-term Rating Categories by one or more of the Rating Agencies; or (B) fully secured by obligations described in clause (ii) or (iii) of this definition of Permitted Investments (1) which are valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to the principal amount of the investment, (2) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (3) subject to a perfected first lien in favor of the Trustee, and (4) free and clear from all third-party liens;

(vi) Long-term or medium-term corporate debt guaranteed by any corporation that is rated at all times in one of the two highest Rating Categories by one or more of the Rating Agencies;

(vii) Repurchase agreements which are (A) entered into with banks or trust companies organized under state law, national banking associations, insurance companies or government bond dealers reporting to, trading with, and recognized as a primary dealer by, the Federal Reserve Bank of New York and which either are members of the Security Investors Protection Corporation or with a dealer or parent holding company that has at all times an investment grade rating from one or more of the Rating Agencies and (B) fully secured by obligations specified in clauses (ii) or (iii) of this definition of Permitted Investments (1) which are valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at least equal to the amount invested in the repurchase agreements, (2) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (3) subject to a perfected first lien in favor of the Trustee and (4) free and clear from all third-party liens;

(viii) Prime commercial paper of a United States corporation, finance company or banking institution rated at all times in the highest short-term Rating Category of one or more of the Rating Agencies;

(ix) Shares of a diversified open-end management investment company (as defined in the Investment Company Act of 1940, as amended) or shares in a regulated investment company (as defined in Section 851(a) of the Code) that is (A) a money market fund that is rated at all times in one of the two highest Rating Categories by one or more of the Rating Agencies or (B) a money market fund or account of the Trustee or its affiliates or any state or federal bank that is rated at all times at least in the highest short-term Rating Category by one or more of the

Rating Agencies or is rated at all times in one of the two highest long-term Rating Categories by one or more of the Rating Agencies, or whose own bank holding company parent is rated at all times at least in the highest short-term Rating Category by one or more of the Rating Agencies or is rated at all times in one of the two highest long-term Rating Categories by one or more of the Rating Agencies, or that has a combined capital and surplus of not less than $50,000,000 (all investments included in this clause (x) may include funds which the Trustee or its affiliates provide investment advisory or other management services);

(x) Interest bearing notes issued by a banking institution having a combined capital and surplus of at least $500,000,000 and whose senior debt is rated at all times in the highest Rating Category by one or more of the Rating Agencies;

(xi) Public housing bonds issued by public agencies which are either unconditionally guaranteed as to principal and interest by the United States of America, or rated at all times in the highest Rating Category by one or more of the Rating Agencies;

(xii) Obligations issued or guaranteed by the Private Export Funding Corporation, the Resolution Funding Corporation and any other instrumentality or agency of the United States of America;

(xiii) Demand deposits, including interest bearing money market accounts, time deposits, trust funds, trust accounts, overnight bank deposits, interest-bearing deposits, other deposit products, certificates of deposit, including those placed by a third party pursuant to an agreement between the Trustee and the Authority, or bankers acceptances of depository institutions, including the Trustee or any of its affiliates, (a) that are fully insured by the Federal Deposit Insurance Corporation or (b) held by a bank (including the Trustee and its affiliates) rated not less than AA by S&P or Aa by Moody's (in each case, without regard to ratings modifiers); and

(xiv) Investment Agreements.

"*Principal Amount*" or "*principal amount*" shall mean, as of any date of calculation, (a) with respect to any Capital Appreciation Bond, the difference between the stated amount to be paid at maturity and the Accreted Value being deemed unearned interest, and (b) with respect to any other Bonds, the principal amount of such Bond payable at maturity.

"*Project*" shall mean any and all facilities, improvements and other expenditures related to the Airport System financed in whole or in part with proceeds of a Series of Bonds.

"*Qualified Self-Insurance*" has the meaning set forth in Section 5.10 hereof.

"*Qualified Swap*" shall mean any Swap (a) whose Designated Debt is all or part of a particular Series of Bonds; (b) whose Swap Provider is a Qualified Swap Provider or has been a Qualified Swap Provider within the 60 day period preceding the date on which the calculation of

Annual Debt Service or Aggregate Annual Debt Service is being made; (c) which has a term not greater than the term of the Designated Debt or to a specified mandatory tender or redemption of such Designated Debt; and (d) which has been designated in writing to the Trustee by the Authority as a Qualified Swap with respect to such Bonds.

"*Qualified Swap Provider*" shall mean a financial institution whose senior long-term debt obligations, or whose obligations under any Qualified Swap are (a) guaranteed by a financial institution, or subsidiary of a financial institution, whose senior long-term debt obligations, are rated at least "A1," in the case of Moody's, and "A+," in the case of S&P, or the equivalent thereto in the case of any successor thereto, or (b) fully secured by obligations described in clauses (i) or (ii) of the definition of Permitted Investments which are (w) valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to 105% of the principal amount of the investment, together with the interest accrued and unpaid thereon, (x) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (y) subject to a perfected first lien on behalf of the Trustee, and (z) free and clear from all third-party liens.

"*Rate Stabilization Fund*" shall mean the "Rate Stabilization Fund" created, held and maintained by the Authority pursuant to Section 4.11 hereof.

"*Rating Agency*" and "*Rating Agencies*" shall mean any of Fitch, Kroll, Moody's or S&P, or any other nationally recognized statistical rating organization.

"*Rating Category*" and "*Rating Categories*" shall mean (a) with respect to any long-term rating category, all ratings designated by a particular letter or combination of letters, without regard to any numerical modifier, plus or minus sign or other modifier, and (b) with respect to any short-term or commercial paper rating category, all ratings designated by a particular letter or combination of letters and taking into account any numerical modifier, but not any plus or minus sign or other modifier.

"*Rebate Fund*" shall mean any Fund created by the Authority or the Trustee pursuant to a Supplemental Indenture in connection with the issuance of any Series of Bonds for the purpose of complying with the Code and providing for the collection and holding for and payment of amounts to the United States of America.

"*Record Date*" shall mean, with respect to any Series of Bonds, the record date as specified in the Supplemental Indenture which provides for the issuance of such Series.

"*Refunding Bonds*" shall mean any Bonds issued pursuant to Section 2.10 hereof to refund and/or defease all or a portion of any Series of Outstanding Bonds.

"*Registrar*" shall mean the bank, trust company, other financial institution or other entity designated in a Supplemental Indenture to perform the function of Registrar under this Indenture or any Supplemental Indenture, and which bank, trust company, other financial institution or other entity has accepted the position in accordance with Section 9.12 hereof.

"*Regularly Scheduled Swap Payments*" shall mean the regularly scheduled payments under the terms of a Swap which are due absent any termination, default or dispute in connection with such Swap.

"*Released Revenues"* shall mean Revenues of the Authority in respect of which the Trustee has received the following:

(a) a request of an Authorized Authority Representative describing such Revenues and requesting that such Revenues be excluded from the pledge and lien of this Indenture on Net Revenues;

(b) either (i) a Consultant's certificate showing that, based upon reasonable assumptions, projected Net Revenues after the Revenues covered by the Authorized Authority Representative's request are excluded, calculated in accordance with the additional Bonds test in Section 2.11 hereof for each of the three full Fiscal Years following the Fiscal Year in which such certificate is delivered, will not be less than the larger of (A) the amounts needed for making the required deposits to the Debt Service Funds, the Debt Service Reserve Fund, including any Common Debt Service Reserve Account or Series Debt Service Reserve Account contained therein, the Subordinate Obligation Debt Service Funds, the Subordinate Obligation Debt Service Reserve Funds, and the Renewal and Replacement Fund or (B) an amount not less than 150% of the average Annual Debt Service for each Fiscal Year during the remaining term of all Bonds that will remain Outstanding after the exclusion of such Revenues (disregarding any Bonds that have been or will be paid or discharged); or

(ii) an independent certified public accountant's certificate to the effect that Net Revenues in the two most recently completed Fiscal Years, after the Revenues covered by the Authorized Authority Representative's request are excluded, were not less than the larger of (A) the amounts needed for making the required deposits to the Debt Service Funds, the Debt Service Reserve Fund, including any Common Debt Service Reserve Account or Series Debt Service Reserve Account contained therein, the Subordinate Obligation Debt Service Funds, the Subordinate Obligation Debt Service Reserve Funds, and the Renewal and Replacement Fund or (B) 135% of (1) average Annual Debt Service on all Bonds Outstanding in each such Fiscal Year (disregarding any Bonds that have been paid or discharged), plus (2) average Annual Debt Service with respect to any additional Bonds issued since the completion of such Fiscal Year or proposed to be issued at the time such certificate is delivered;

(c) an opinion of Bond Counsel to the effect that (i) the conditions set forth herein to the release of such Revenues have been met and (ii) the exclusion of such Revenues from the pledge and lien of this Indenture will not, in and of itself, cause the interest on any Outstanding Bonds to be included in gross income for purposes of federal income tax;

(d) written confirmation from each of the Rating Agencies then rating the Bonds to the effect that the exclusion of such Revenues from the pledge and lien of this Indenture will not cause a withdrawal of or reduction in any unenhanced rating or outlook then assigned to the Bonds; and

(e) evidence that notice of the proposed Released Revenues was given to all current Credit Providers in respect of any Bonds at least 30 days prior to the proposed effective date of the release of such Revenues.

Upon the Trustee's receipt of such documents, the Revenues described in the Authorized Authority Representative's request shall be excluded from the pledge and lien of this Indenture, and the Trustee shall take all reasonable steps requested by the Authorized Authority Representative to evidence or confirm the release of such pledge and lien on the Released Revenues.

"*Renewal and Replacement Fund*" shall mean the "Renewal and Replacement Fund" created, held and maintained by the Authority pursuant to Section 4.08 hereof.

"*Renewal and Replacement Fund Requirement*" shall mean, as of any date of calculation, an amount not less than $5 million, or such other amount as shall be established by the Authority from time to time.

"*Repayment Obligations*" shall mean an obligation arising under a written agreement of the Authority and a Credit Provider pursuant to which the Authority agrees to reimburse the Credit Provider for amounts paid through a Credit Facility used to pay debt service on any Bonds, or an obligation arising under a written agreement of the Authority and a Liquidity Provider pursuant to which the Authority agrees to reimburse the Liquidity Provider for amounts paid through a Liquidity Facility used to purchase Bonds.

"*Representation Letter*" means the Blanket Issuer Letter of Representations from the Authority to DTC with respect to the issuance of Bonds in book-entry form.

"*Reserve Requirement*" shall mean, with respect to the Common Debt Service Reserve Account, except as otherwise set forth in a Supplemental Indenture, an amount equal to the lesser of (a) as of the date of each calculation, the Maximum Aggregate Annual Debt Service For Reserve Requirement for all Outstanding Bonds participating in the Common Debt Service Reserve Account, (b) 10% of the original principal amount of all Outstanding Bonds participating in the Common Debt Service Reserve Account, less the amount of original issue discount with respect to such Bonds if such original issue discount exceeded 2% of such Bonds at the time of their original issuance, and (c) as of the date of each calculation, 125% of the average Aggregate Annual Debt Service For Reserve Requirement for all Outstanding Bonds participating in the Common Debt Service Reserve Account. The Reserve Requirement with respect to any Series Debt Service Reserve Account shall be set forth in the Supplemental Indenture establishing such Series Debt Service Reserve Account.

"*Responsible Officer*" shall mean an officer or assistant officer of the Trustee assigned by the Trustee to administer this Indenture.

"*Revenue Fund*" shall mean the "Revenue Fund" created, held and maintained by the Authority for the purpose of depositing all Revenues and other moneys and funds not included in Revenues pursuant to Section 4.03(a) hereof.

"*Revenues*" shall mean, except to the extent specifically excluded herefrom, all income, receipts, earnings and revenues received by or accrued to the Authority from the operation of the Airport System for a given period, as modified from time to time, including, but not limited to, (a) rates, tolls, fees, rentals (including ground rents from Special Facilities), charges and other payments made to or owed to the Authority for the use or availability of the Airport System, (b) amounts received or owed from the sale or provision of supplies, materials, goods and services provided by or made available by the Authority, including rental or business interruption insurance proceeds, received by, held by, accrued to or entitled to be received by the Authority or any successor thereto from the possession, management, charge, superintendence and control of the Airport System and its related facilities or activities and undertakings related thereto or from any other facilities wherever located with respect to which the Authority receives payments which are attributable to the Airport System or activities or undertakings related thereto, and (c) Other Pledged Revenues. Additionally, "Revenues" shall also include all income, receipts and earnings from the investment of amounts held in the Revenue Fund, any Debt Service Fund (except Capitalized Interest on deposit therein), the Debt Service Reserve Fund, and any Common Debt Service Reserve Account or Series Debt Service Reserve Account therein and such additional revenues, if any, as are designated as "Revenues" under the terms of any Supplemental Indenture.

The following, including any investment earnings thereon, are specifically excluded from Revenues: (i) any gifts, grants, and other income (including any investment earnings thereon) otherwise included in this definition of "Revenues" which are restricted by their terms to purposes inconsistent with the payment of debt service on the Bonds, (ii) Net Proceeds and other insurance proceeds, to the extent the use of such Net Proceeds or other proceeds is restricted by the terms of the policy under which they are paid to a use inconsistent with the payment of debt service on the Bonds (except to the extent Net Proceeds are utilized to pay Operation and Maintenance Expenses), (iii) Special Facilities Revenues, (iv) Passenger Facility Charges (including PFCs Available for Debt Service), (v) the proceeds of the sale of Bonds or other obligations issued for Airport System purposes, and (vi) rents or other payments of any nature received now or in the future attributable to any ground leases, facility leases or other developments which are identified as the Pittsburgh International Airport Innovation Campus and/or Neighborhood 91 as well as moneys received that are pledged to the payment of any debt instrument that will generate new and/or enhanced revenues for the Authority.

Additionally, the following, including any investment earnings thereon, are specifically excluded from "Revenues,": (A) any Swap Termination Payments paid to the Authority pursuant to a Qualified Swap, (B) subject to clause (i) in the previous paragraph, grants and other charges authorized on or after the date of this Indenture by federal and/or Commonwealth laws or regulations to be assessed to fund specific programs at the Airport System, (C) investment income derived from any moneys or securities which may be placed in escrow or trust to defease Bonds, (D) any arbitrage earnings which are required to be paid to the U.S. Government pursuant to Section 148 of the Code, (E) Capitalized Interest, (F) Customer Facility Charges, Gaming Revenues and Natural Gas Revenues unless designated as and included in "Other Pledged Revenues", (G) Federal Direct Payments, (H) excess Revenues from a prior Fiscal Year deposited in the Airport System Capital Fund, and (I) any Released Revenues in respect of which the Authority has filed with the Trustee the request of the Authorized Authority Representative, a Consultant's or independent certified public accountant's certificate, opinion of

Bond Counsel and the other documents contemplated in the definition of the term "Released Revenues."

Further, interest earnings or other investment earnings on any Construction Fund established by any Supplemental Indenture are specifically excluded from "Revenues," unless otherwise provided for in a Supplemental Indenture.[2]

"*Series*" shall mean Bonds designated as a separate Series by a Supplemental Indenture.

"*Series Debt Service Reserve Account*" shall mean an Account or Accounts (other than the Common Debt Service Reserve Account) created by the Authority pursuant to a Supplemental Indenture in connection with the issuance of any Series of Bonds and that is required to be funded for the purpose of providing additional security for such Series of Bonds.

"*Significant Portion*" shall mean any Airport Facilities or portions thereof which, if such facilities had been sold or disposed of by the Authority at the beginning of an annual period which includes the month of commencement of the 12-month period ending on the day of such disposition would have resulted in a reduction in Net Revenues for such annual period of more than 5% when the actual Net Revenues for such annual period are decreased by the Revenues directly attributable to such Airport Facilities and increased by the expenses of the Authority directly attributable to such Airport Facilities.

"*S&P*" shall mean S&P Global Ratings, a Standard & Poor's Financial Services LLC business, and its successors and assigns, and if S&P Global Ratings shall for any reason no longer perform the functions of a nationally recognized statistical rating organization, "S&P" shall be deemed to refer to any nationally recognized statistical rating organization designated by the Authority.

"*Special Facilities*" or "*Special Facility*" shall mean a facility or group of facilities or category of facilities which are designated as a Special Facility pursuant to the provisions of Section 5.07 hereof.

"*Special Facility Agreement*" shall mean a Special Facility lease, loan or other agreement entered into between the Authority and the user or occupier of such Special Facility.

"*Special Facilities Revenues*" shall mean the contractual payments and all other revenues (other than ground rentals relating to such Special Facility) derived by or available to the Authority from a Special Facility which are pledged to secure Special Facility Obligations.

"*Special Facility Obligations*" shall mean bonds or other debt instruments issued pursuant to an indenture other than this Indenture to finance Special Facilities and which are not secured by nor payable from a lien on and pledge of the Net Revenues but which are secured by revenues derived from Special Facilities.

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[2] For a description of the amendment to the definition of "*Revenues*" made by the Second Supplemental Indenture, to become effective upon the issuance of the Series 2021 Bonds, see "AMENDMENTS TO THE MASTER INDENTURE."

"*Subaccount*" shall mean any subaccount established pursuant to this Indenture or any Supplemental Indenture.

"*Subordinate Obligation*" shall mean any bond, note or other debt instrument issued or otherwise entered into by the Authority which is secured by a pledge of and lien on and payable from Revenues remaining after the deposits to the Funds, Accounts and Subaccounts set forth in Section 4.03(b)(i) through (iii) hereof. "Subordinate Obligations" are not Bonds for purposes of this Indenture; provided, however, the Authority may henceforth by Supplemental Indenture elect to have the provisions of this Indenture applicable to the Bonds apply to the Subordinate Obligations issued thereunder, except that such Subordinate Obligations shall be secured by a pledge of and lien on Revenues remaining after the deposits to the Funds, Accounts and Subaccounts set forth in Section 4.03(b)(i) through (iii) hereof. No bond, note or other instrument of indebtedness shall be deemed to be a "Subordinate Obligation" for purposes of this Indenture and payable from Revenues remaining after the deposits to the Funds, Accounts and Subaccounts set forth in Section 4.03(b)(i) through (iii) hereof unless specifically designated by the Authority as a "Subordinate Obligation" in a Supplemental Indenture or other written instrument. In connection with any Subordinate Obligation with respect to which a Swap is in effect or proposes to be in effect, the term "Subordinate Obligation" includes, collectively, both such Subordinate Obligation and either such Swap or the obligations of the Authority under each such Swap, as the context requires. The term "Subordinate Obligations" also includes a Swap or the obligations of the Authority under such Swap which has been entered into in connection with a Subordinate Obligation, as the context requires, although none of the Subordinate Obligations with respect to which such Swap was entered into remain outstanding. In connection with any Bonds with respect to which a Qualified Swap is in effect or proposed to be in effect, the term "Subordinate Obligation" includes any Swap Termination Payment if designated as a Subordinate Obligation in a Supplemental Indenture.

"*Supplemental Indenture*" shall mean any document supplementing and/or amending this Indenture or providing for the issuance of Bonds and entered into as provided in Article X hereof.

"*Swap*" shall mean any financial arrangement between the Authority and a Swap Provider which provides that (a) each of the parties shall pay to the other an amount or amounts calculated as if such amount were interest accruing during the term of the arrangement at a specified rate (whether fixed or a variable rate or measured against some other rate) on a Designated Debt, and payable from time to time or at a designated time or times (whether before, during or after the term of the arrangement); (b) if such amount is to be paid before it is deemed to have accrued, the amount paid shall reflect the present value of such future amount (i.e., an upfront premium), while an amount to be paid after it is deemed to have accrued shall reflect the time value of such funds; and (c) payment dates and calculated accrual rates need not be the same for each payor, but to the extent payment dates coincide, the arrangement may (but need not) provide that one shall pay to the other any net amount due under such arrangement.

"*Swap Provider*" shall mean a party to a Swap with the Authority.

"*Swap Termination Payment*" shall mean an amount payable by the Authority or a Qualified Swap Provider, in accordance with a Qualified Swap, to compensate the other party to the Qualified Swap for any losses and costs that such other party may incur as a result of an event of default or the early termination of the obligations, in whole or in part, of the parties under such Qualified Swap.

"*Synthetic Fixed Rate Debt*" shall mean indebtedness issued by the Authority which is combined, as Designated Debt, with a Qualified Swap and creates, in the opinion of a Consultant, a substantially fixed-rate maturity or maturities for a term not exceeding such maturity or maturities.

"*Tender Indebtedness*" shall mean any Bonds or portions of Bonds a feature of which is an obligation on the part of the Bondholders, under the terms of such Bonds, to tender all or a portion of such Bonds to the Authority, the Trustee, the Paying Agent or other fiduciary or agent or Credit Provider or Liquidity Provider for payment or purchase and requiring that such Bonds or portions of Bonds be purchased if properly presented.

"*Term Bonds*" shall mean Bonds of a Series which are payable on or before their specified maturity dates from sinking fund installment payments established pursuant to the Supplemental Indenture for such Series for that purpose and calculated to retire the Bonds on or before their specified maturity dates.

"*Trustee*" shall mean the entity named as such in the introductory paragraph of this Indenture until a successor replaces it in accordance with Article IX hereof and, thereafter, shall mean such successor.

"*United States Bankruptcy Code*" shall mean Title 11 U.S.C., Section 101 *et seq.*, as amended or supplemented from time to time, or any successor federal act.

"*United States Obligations*" shall mean direct and general obligations of the United States of America, or obligations that are unconditionally guaranteed as to principal and interest by the United States of America, including, with respect only to direct and general obligations and not to guaranteed obligations, evidences of ownership of proportionate interests in future interest and/or principal payments of such obligations, provided that investments in such proportionate interests must be limited to circumstances wherein: (i) a bank or trust company acts as custodian and holds the underlying United States Obligations; (ii) the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor of the underlying United States Obligations; and (iii) the underlying United States Obligations are held in a special account separate from the custodian's general assets and are not available to satisfy any claim of the custodian, any person claiming through the custodian or any person to whom the custodian may be obligated. "United States Obligations" shall include any stripped interest or principal portion of United States Treasury securities and any stripped interest portion of Resolution Funding Corporation securities.

"*Variable Rate Indebtedness*" shall mean any Bond or Bonds the interest rate on which is not, at the time in question, fixed to maturity, excluding any Commercial Paper.

Except as otherwise indicated, references to Articles and Sections are to the Articles and Sections of this Indenture.

ARTICLE II

FORM, EXECUTION, DELIVERY AND REGISTRATION OF BONDS

Section 2.01. Issuance of Bonds; Form; Dating. Either taxable or tax-exempt Bonds may be issued by the Authority under the terms of this Indenture for any purpose for which the Authority, at the time of such issuance, may incur debt. Bonds may be issued under this Indenture only if the provisions of Section 2.09 hereof are satisfied. The total principal amount of Bonds of each Series Outstanding may not exceed the amount specified in the Supplemental Indenture providing for the issuance of such Bonds, except as provided in Section 2.05 hereof with respect to replacement of mutilated, lost, stolen or destroyed Bonds. The Bonds may be in certificated or uncertificated form, and Bonds which are issued in certificated form may be freely transferable or may be immobilized and held by a custodian for the beneficial owners, all as shall be set forth or permitted in the Supplemental Indenture providing for the issuance of such Bonds. The Bonds may have notations, legends or endorsements required by law or usage.

Bonds will be numbered and dated as provided in the applicable Supplemental Indenture.

All Bonds shall contain a statement to the following effect:

The principal of, interest on and premium, if any, on the Bonds are payable by the Authority only out of Net Revenues and from such other moneys as may be available for such purpose as described in the Indenture. Neither the general credit of the Authority nor the credit or taxing power of the County of Allegheny, the Commonwealth of Pennsylvania or any political subdivision thereof is pledged for the payment of the Bonds. The Bonds shall not be or be deemed a general obligation of the Authority or an obligation of the County, the Commonwealth of Pennsylvania or any political subdivision thereof. The Authority has no taxing power.

Section 2.02. Terms, Medium and Place of Payment. The Bonds shall be issued in the principal amount, shall bear interest at a rate or rates, including a rate of 0% and including variable or adjustable rates, or by such other methods as the Authority may from time to time determine, and such interest may be payable periodically, in whole or in part, or may be accumulated and paid at maturity or at such other time or times as the Authority shall determine. Bonds shall mature and shall be subject to redemption prior to their respective maturities, all as shall be set forth in a Supplemental Indenture and permitted under the Act. The Bonds of each Series shall state that they are issued under and are secured by this Indenture and the pledge of Net Revenues and state that regardless of the form thereof, they are "Bonds" issued hereunder and within the meaning of this Indenture.

Payments with respect to the Bonds shall be made as provided in the Supplemental Indenture providing for the issuance of such Bonds or as provided in the Bonds, which provisions shall include the designation of the currency in which such payments shall be made.

Section 2.03. Execution and Authentication. The Bonds, if in certificated form, will be signed for the Authority as provided in the Supplemental Indenture or in the resolution authorizing such Bonds. In case any officer whose signature or whose facsimile signature shall appear on any Bonds shall cease to be such officer before the authentication of such Bonds, such signature or the facsimile signature thereof shall nevertheless be valid and sufficient for all purposes the same as if he or she had remained in office until authentication. Also, if a person signing a Bond is the proper officer on the actual date of execution, the Bond will be valid even if that person is not the proper officer on the nominal date of action and even though, at the date of this Indenture, such person was not such officer.

Except as otherwise provided in a Supplemental Indenture, a Bond in certificated form will not be valid until the Trustee or its agent or an authenticating agent designated by the Authority manually signs the certificate of authentication on the Bond. Such signature will be conclusive evidence that the Bond has been authenticated under this Indenture.

The Authority may appoint an authenticating agent or the Trustee may appoint an authenticating agent acceptable to the Authority to authenticate Bonds or different authenticating agents may be appointed for different Series of Bonds. An authenticating agent may authenticate Bonds whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent.

Bonds issued under this Indenture may be issued in uncertificated form, in which case the procedures for issuance and delivery and evidence of validity, ownership, transfer and exchange shall be as provided in a Supplemental Indenture, and neither the provisions of this Section 2.03 nor any other provision of this Indenture shall be deemed to prohibit or restrict the issuance of uncertificated Bonds.

Section 2.04. Bond Register. Bonds of each Series may be presented at the principal corporate trust office of the Trustee or such other Registrar, unless a different office has been designated for such purpose, for registration, transfer and exchange. The Trustee or a Registrar will keep a register of each Series of Bonds and of their transfer and exchange.

Section 2.05. Mutilated, Lost, Stolen or Destroyed Bonds.

(a) In the event any Bond is mutilated or defaced but identifiable by number and description, the Authority shall execute and the Trustee shall authenticate and deliver a new Bond of like Series, date, maturity and denomination as such Bond, upon surrender thereof to the Trustee; provided that there shall first be furnished to the Trustee and the Authority clear and unequivocal proof satisfactory to the Trustee that the Bond is mutilated or defaced. The Bondholder shall accompany the above with a deposit of money required by the Trustee for the cost of preparing the substitute Bond and all other expenses connected with the issuance of such substitute. The Trustee shall then cause proper record to be made of the cancellation of the original, and thereafter the substitute shall have the validity of the original.

(b) In the event any Bond is lost, stolen or destroyed, the Authority may execute and the Trustee may authenticate and deliver a new Bond of like Series, date, maturity and denomination as that Bond lost, stolen or destroyed, provided that there shall first be furnished to the Trustee evidence of such loss, theft or destruction satisfactory to the Trustee, together with indemnity satisfactory to it and the Authority.

(c) Except as limited by any Supplemental Indenture, the Trustee may charge the holder of any such Bond all governmental charges and transfer taxes, if any, and its reasonable fees and expenses in this connection. All substitute Bonds issued and authenticated pursuant to this Section 2.05 shall be issued as a substitute and numbered, if numbering is provided for by the Supplemental Indenture or the Trustee, as determined by the Trustee. In the event any such Bond has matured or been called for redemption, instead of issuing a substitute Bond, the Trustee may pay the same at its maturity or redemption without surrender thereof upon receipt of indemnity satisfactory to the Trustee.

Section 2.06. Book-Entry Bonds.

(a) Except as provided in subparagraph (c) of this Section or a Supplemental Indenture, the Bondholder of all of the Bonds shall be DTC and the Bonds shall be registered in the name of Cede & Co., as nominee for DTC. Payment of principal and redemption price of and interest on any Bond registered in the name of Cede & Co. shall be made by wire transfer of New York clearing house or equivalent next day funds or by wire transfer of same day funds to the account of Cede & Co. at the address indicated on the record date or special record date for Cede & Co. in the registration books of the Registrar.

(b) The Bonds shall be initially issued in the form of separate single authenticated fully registered bonds for each separate stated maturity and interest rate for each Series of the Bonds. Upon initial issuance, the ownership of such Bonds shall be registered in the registration books of the Registrar in the name of Cede & Co., as nominee of DTC. The Trustee, the Registrar and the Authority may treat DTC (or its nominee) as the sole and exclusive owner of the Bonds registered in its name for the purposes of paying the principal and redemption price of and interest on the Bonds, selecting the Bonds or portions thereof to be redeemed, giving any notice permitted or required to be given to Bondholders under this Indenture or a Supplemental Indenture, registering the transfer of Bonds, obtaining any consent or other action to be taken by Bondholders and for all other purposes whatsoever, and neither the Trustee, the Registrar nor the Authority shall be affected by any notice to the contrary. Neither the Trustee, the Registrar nor the Authority shall have any responsibility or obligation to any Participant, any person claiming a beneficial ownership interest in the Bonds under or through DTC or any Participant, or any other person which is not shown on the registration books as being a Bondholder, with respect to the accuracy of any records maintained by DTC or any Participant; the payment by DTC or any Participant of any amount in respect of the principal and redemption price of or interest on the Bonds; any notice which is permitted or required to be given to Bondholders under this Indenture of a Supplemental Indenture; the selection by DTC or any Participant of any person to receive payment in the event of a partial redemption of the Bonds; any consent given or other action taken by DTC as Bondholder; or any other purpose. Except as provided in subparagraph (c) of this Section or a Supplemental Indenture, the Trustee shall pay all principal and redemption price of and interest on the Bonds, and all such payments shall be valid and effective to fully satisfy and discharge the Authority's obligations with respect to the principal and redemption price of and interest on the Bonds to the extent of the sum or sums so paid.

Except as provided in subparagraph (c) of this Section or a Supplemental Indenture, no person other than DTC shall receive an authenticated Bond evidencing the obligation of the Authority to make payments of principal, redemption price and interest pursuant to this Indenture or a Supplemental Indenture. Upon delivery by DTC to the Trustee of written notice to the effect that DTC has determined to substitute a new nominee in place of Cede & Co., and subject to the provisions herein with respect to Record Dates, the word "Cede & Co." in this Indenture and any Supplemental Indenture shall refer to such new nominee of DTC.

(c) In the event the Authority determines that it is in the best interest of the beneficial owners that they be able to obtain bond certificates, and notifies DTC, the Trustee and the Registrar of such determination, then DTC will notify the Participants of the availability through DTC of bond certificates. In such event, the Trustee shall authenticate and the Registrar shall transfer and exchange bond certificates as requested by DTC and any other Bondholders in appropriate amounts. DTC may determine to discontinue providing its services with respect to the Bonds at any time by giving notice to the Authority and the Trustee and discharging its responsibilities with respect thereto under applicable law. Under such circumstances (if there is no successor securities depository), the Authority and the Trustee shall be obligated to deliver bond certificates as described in this Indenture. In the event bond certificates are issued, the provisions of this Indenture or a Supplemental Indenture shall apply to, among other things, the transfer and exchange of such certificates and the method of payment of principal and redemption price of and interest on such certificates. Whenever DTC requests the Authority and the Trustee to do so, the Trustee and the Authority will cooperate with DTC in taking appropriate action after reasonable notice (i) to make available one or more separate certificates evidencing the Bonds to any Participant having Bonds credited to its DTC account or (ii) to arrange for another securities depository to maintain custody of certificates evidencing the Bonds.

(d) Notwithstanding any other provision of this Indenture or a Supplemental Indenture to the contrary, so long as any Bond is registered in the name of Cede & Co., as nominee of DTC, all payments with respect to the principal and redemption price of and interest on such Bond and all notices with respect to such Bond shall be made and given, respectively, to DTC as provided in the Representation Letter.

(e) In connection with any notice or other communication to be provided to Bondholders pursuant to this Indenture or a Supplemental Indenture by the Authority or the Trustee with respect to any consent or other action to be taken by Bondholders, the Authority or the Trustee, as the case may be, shall establish a record date for such consent or other action and give DTC notice of such record date not less than fifteen (15) calendar days in advance of such record date to the extent possible. Notice to DTC shall be given only when DTC is the sole Bondholder.

NEITHER THE AUTHORITY NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO PARTICIPANTS OR BENEFICIAL OWNERS WITH RESPECT TO: THE PAYMENT BY DTC TO ANY PARTICIPANT OF THE PRINCIPAL AND REDEMPTION PRICE OF OR

INTEREST ON THE BONDS; THE PROVIDING OF NOTICE TO PARTICIPANTS OR BENEFICIAL OWNERS; THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, OR ANY PARTICIPANT; OR ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS BONDHOLDER OF THE BONDS.

Section 2.07. Registration and Transfer or Exchange of Bonds; Persons Treated as Owners. Unless otherwise provided by a Supplemental Indenture, all Bonds shall be issued in fully registered form.

Upon surrender for transfer of any Bond at the principal corporate trust office of the Trustee or Registrar, the Trustee or Registrar shall deliver in the name of the transferee or transferees a new fully authenticated and registered Bond or Bonds of authorized denominations of the same Series and same maturity for the same aggregate principal amount.

Bondholders may present Bonds at the principal corporate trust office of the Registrar, or such other place as designated by the Registrar, for exchange for Bonds of different authorized denominations and, upon such presentation, the Trustee or Registrar shall deliver to the Bondholder a new fully authenticated and registered Bond or Bonds of the same Series and same maturity for the same aggregate principal amount.

All Bonds presented for transfer or exchange shall be accompanied by a written instrument or instruments of transfer or authorization for exchange, in form and with guaranty of signature satisfactory to the Trustee or Registrar, duly executed by the Bondholder or by his duly authorized attorney.

Except as limited by any Supplemental Indenture, the Trustee or Registrar also may require payment from the Bondholder of a sum sufficient to cover any tax, or other governmental fee or charge that may be imposed in relation thereto. Such taxes, fees and charges shall be paid before any such new Bond shall be delivered.

Supplemental Indentures may designate certain limited periods during which Bonds will not be exchanged or transferred.

Bonds delivered upon any exchange or transfer as provided herein, or as provided in Section 2.05 hereof, shall be valid limited obligations of the Authority, evidencing the same debt as the Bond or Bonds surrendered, shall be secured by this Indenture and shall be entitled to all of the security and benefits hereof to the same extent as the Bond or Bonds surrendered.

The Authority, the Trustee, the Registrar and the Paying Agent shall treat the Bondholder of a Bond, as shown on the registration books kept by the Registrar, as the person exclusively entitled to payment of principal, premium, if any, and interest on such Bond and as the party entitled to the exercise of all other rights and powers of the Bondholder, except that all interest payments will be made to the party who, as of the Record Date, is the Bondholder.

Section 2.08. Destruction of Bonds. Whenever any Bonds shall be delivered to the Trustee for cancellation pursuant to this Indenture, upon payment of the principal amount and interest represented thereby or for replacement pursuant to Section 2.05 hereof or exchange or transfer pursuant to Section 2.07 hereof, such Bond shall be cancelled and destroyed by the Trustee or the Registrar and counterparts of a certificate of destruction evidencing such destruction shall be furnished by the Trustee to the Authority.

Section 2.09. Issuance of Series of Bonds; Supplemental Indenture; Application of Bond Proceeds. Bonds may be issued, from time to time, subject to the conditions of this Section 2.09.

Bonds shall be dated, shall mature, shall bear interest, shall be subject to redemption and shall be amortized and shall be issued and reissued from time to time, all as authorized under the Act and provided for in the Supplemental Indenture relating to such Series of Bonds. In addition, each such Supplemental Indenture may provide for the appointment of a Registrar or Registrars and a Paying Agent or Paying Agents and such other agents as the Authority shall determine to be necessary in addition to or in place of the Trustee.

Each Series of the Bonds, upon execution by the Authority, shall be deposited with the Trustee or an agent for authentication and delivery, but prior to or simultaneously with the original delivery of such Series of Bonds, there shall be filed with the Trustee the following:

(a) an original executed copy, certified by the Authority Secretary, of this Indenture;

(b) an original executed copy, certified by the Authority Secretary, of the Supplemental Indenture or Supplemental Indentures providing for the issuance of such Series of Bonds and setting forth the terms of such Series of Bonds;

(c) except with respect to the issuance of any Refunding Bonds, a certificate of an Authorized Authority Representative listing those Projects or undertakings which the Authority expects to finance with proceeds of the sale of such Series of Bonds or providing a list from which the Authority expects to select those Projects which will be financed with proceeds of the sale of such Series of Bonds and such certificate shall, with respect to each item on the list include an estimated cost of such Projects or undertaking;

(d) except with respect to the issuance of the Initial Bonds, the certificate of the Authorized Authority Representative or the Consultant or Consultants, as the case may be, required by Section 2.11(a) and/or (b) hereof;

(e) a certificate of an Authorized Authority Representative stating that (i)(A) none of the Events of Default set forth in Sections 8.01 hereof have occurred and remain uncured or (B) upon issuance of such Series of Bonds, all Events of Default set forth in Section 8.01 hereof that have occurred and are continuing, shall be cured, and (ii) that the Authority is in full compliance with the terms of Section 5.04 hereof;

(f) an opinion of Bond Counsel to the effect that the issuance of such Bonds has been duly authorized, that all legal conditions precedent to the delivery of such Bonds have been fulfilled, and that the Bonds are valid and binding obligations of the Authority in accordance with their terms; and

(g) written instructions from the Authority to authenticate the Bonds and, upon receipt of the purchase price, to deliver the Bonds to or upon the order of the purchasers named in such instructions.

When the documents mentioned in clauses (a) through (g), inclusive, of the immediately preceding paragraph shall have been filed with the Trustee and when such Bonds shall have been executed and authenticated (if applicable), the Trustee or authenticating agent shall deliver such Bonds to or upon the order of the purchasers thereof, but only upon payment by the purchasers of the purchase price of such Bonds.

Section 2.10. Refunding Bonds. Refunding Bonds may be issued under and secured by this Indenture. Such Refunding Bonds shall be issued in accordance with the provisions of Sections 2.09 and 2.11(b)(i) hereof.

Section 2.11. Additional Bonds Test.

(a) Subject to the provisions of Section 2.11(b) hereof and excepting the Initial Bonds, as a condition to the issuance of additional Series of Bonds, there shall be delivered to the Trustee either:

(i) a certificate, dated as of a date between the date of pricing of the Bonds being issued and the date of delivery of such Bonds (both dates inclusive), prepared by an Authorized Authority Representative showing that the Net Revenues for the last audited Fiscal Year or any 12 consecutive months out of the most recent 18 consecutive months immediately preceding the date of issuance of the proposed Series of Bonds, together with any funds available in the Coverage Account for the same time period, were at least equal to (A) 125% of Maximum Aggregate Annual Debt Service with respect to all Outstanding Bonds and the proposed Series of Bonds, calculated as if the proposed Series of Bonds were then Outstanding, and (B) 100% of the maximum aggregate annual debt service with respect to all outstanding Subordinate Obligations; or

(ii) a certificate, dated as of a date between the date of pricing of the Bonds being issued and the date of delivery of such Bonds (both dates inclusive), prepared by a Consultant, nationally recognized as an expert in the area of air traffic and airport financial analysis, showing that:

(A) the Net Revenues for the last audited Fiscal Year or for any 12 consecutive months out of the most recent 18 consecutive months immediately preceding the date of issuance of the proposed Series of Bonds, together with any funds available in the Coverage Account for the same time period, were at least equal to (1) 125% of the sum of the Annual Debt Service due and payable with respect to all Outstanding Bonds, and (2) 100% of the annual debt service with respect to all outstanding Subordinate Obligations for such applicable period; and

(B) for the period from and including the first full Fiscal Year following the issuance of such proposed Series of Bonds during which no interest on such Series of Bonds is expected to be paid from the proceeds thereof through and including the later of: (1) the fifth full Fiscal Year following the issuance of such Series of Bonds, or (2) the third full Fiscal Year during which no interest on such Series of Bonds is expected to be paid from the proceeds thereof, the estimated Net Revenues, together with amounts projected to be available in the Coverage Account and any other legally available funds that the Authority expects to use to pay debt service on the Bonds that are in addition to Other Pledged Revenues, for each such Fiscal Year, will be at least equal to (1) 125% of the Aggregate Annual Debt Service for each such Fiscal Year with respect to all Outstanding Bonds and calculated as if (y) the proposed Series of Bonds were then Outstanding, and (z) any future Series of Bonds which the Authority estimates will be required to complete payment of the estimated costs of construction of uncompleted portions of Airport Facilities, and (2) 100% of the annual debt service with respect to all outstanding Subordinate Obligations for each such Fiscal Year.

For purposes of subsections (ii)(B) above, in estimating Net Revenues, the Consultant may take into account (1) Revenues from other Airport Facilities reasonably expected to become available during the period for which the estimates are provided and (2) any increase in fees, rates, charges, rentals or other sources of Revenues which the Consultant believes to be a reasonable assumption for such period. With respect to Operation and Maintenance Expenses, the Consultant shall use such assumptions as the Consultant believes to be reasonable, taking into account: (x) historical Operation and Maintenance Expenses, (y) Operation and Maintenance Expenses associated with any other new Airport Facilities, and (z) such other factors, including inflation and changing operations or policies of the Authority, as the Consultant believes to be appropriate. The Consultant shall include in the certificate or in a separate accompanying report the calculations and assumptions made in determining the estimated Net Revenues and shall also set forth the calculations of Aggregate Annual Debt Service, which calculations may be based upon information provided by another Consultant.

For purposes of preparing the certificate or certificates described above, the Consultant or the Authorized Authority Representative may rely upon financial information provided by the Authority.

(b) Neither of the certificates described above under subsection (a) shall be required if:

(i) the Bonds being issued are for the purpose of refunding then Outstanding Bonds and there is delivered to the Trustee, instead, a certificate of an Authorized Authority Representative or a Consultant showing that Maximum Aggregate Annual Debt Service after the issuance of such Refunding Bonds will not exceed Maximum Aggregate Annual Debt Service prior to the issuance of such Refunding Bonds; or

(ii) the Bonds being issued constitute Notes and there is delivered to the Trustee, instead, a certificate prepared by an Authorized Authority Representative or a Consultant showing that the principal amount of the proposed Notes being issued, together with the principal amount of any Notes then Outstanding, does not exceed 10% of the Net Revenues for any 12 consecutive months out of the most recent 24 months immediately preceding the issuance of the proposed Notes, accompanied by a certificate of an Authorized Authority Representative or a Consultant setting forth calculations showing that for each of the Fiscal Years during which the Notes will be Outstanding, and taking into account the debt service becoming due on such Notes, the Authority will be in compliance with Section 5.04 hereof; or

(iii) the Bonds being issued are Completion Bonds and the following written certificates are delivered to the Trustee: (A) a Consultant's certificate stating that the nature and purpose of such Project has not materially changed, and (B) a certificate of an Authorized Authority Representative to the effect that (1) all of the proceeds (including investment earnings on amounts in the Construction Fund established for the Project) of the original Bonds issued to finance such Project have been or will be used to pay Costs of the Project, (2) the then estimated Costs of the Project exceed the sum of the Costs of the Project already paid plus moneys available in the Construction Fund established for the Project (including unspent proceeds of Bonds previously issued for such purpose), and (3) the proceeds to be received from the issuance of such Completion Bonds plus moneys available in the Construction Fund established for the Project (including unspent proceeds of the Bonds previously issued for such purpose) will be sufficient to pay the remaining estimated Costs of the Project.

(c) For purposes of calculating Aggregate Annual Debt Service pursuant to this Section, the following components of debt service shall be computed as follows:

(i) in determining the amount of principal to be funded in each Fiscal Year, payment shall (unless a different clause of this subsection (c) applies for purposes of determining principal maturities or amortization) be assumed to be made on Outstanding Bonds in accordance with any amortization schedule established by the applicable Supplemental Indenture setting forth the terms of such Bonds, including, as a principal payment, the Accreted Value of any Capital Appreciation Bonds maturing or scheduled for redemption in such Fiscal Year; in determining the amount of interest to be funded in each Fiscal Year, interest payable at a fixed rate shall (except to the extent clause (ii) or (iii) of this subsection (c) applies) be assumed to be made at such fixed rate and on the required funding dates as provided in the applicable Supplemental Indenture; provided, however, that interest payable on the Bonds shall be excluded to the extent such payments are to be paid from Capitalized Interest for such Fiscal Year;

(ii) if all or any portion or portions of an Outstanding Bonds or any Bonds which are then proposed to be issued constitute Balloon Indebtedness, then, for purposes of determining Aggregate Annual Debt Service, each maturity which constitutes Balloon Indebtedness will, unless clause (iii) of this subsection (c) then applies, be treated as if it were to be amortized over a term of not more than 30 years with substantially level annual debt service payments commencing not later than the year following the year in which such Balloon Indebtedness was, or is to be, issued; the interest rate used for such computation shall be that rate determined by a Consultant to be a reasonable market rate for fixed-rate Bonds of a corresponding term issued under this Indenture on the date of such calculation, 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; and with respect to any Bonds only a portion of which constitutes Balloon Indebtedness, the remaining portion will be treated as described in clause (i) of this subsection (c) or such other provision of this subsection (c) as will be applicable and;

(iii) any maturity of Outstanding Bonds or any Bonds which are proposed to be issued that constitutes Balloon Indebtedness and for which the stated maturity date occurs within 12 months from the date such calculation of Aggregate Annual Debt Service is made, shall be assumed to become due and payable on the stated maturity date unless there is delivered to the entity making the calculation of Aggregate Annual Debt Service a certificate of an Authorized Authority Representative stating that the Authority intends to refinance such maturity and stating the probable terms of such refinancing, including the anticipated interest rate (which shall be a rate determined by a Consultant equal to the then current market rate assuming that such maturity were being refinanced on the date of such certificate) and the final maturity date of such refinancing (provided that such refinanced maturity shall be amortized over a term of not more than 30 years from the date of refinancing), and that all necessary approvals of the Authority have been provided to successfully complete such refinancing; upon the receipt of such certificate, such Balloon Indebtedness shall be assumed to be refinanced in accordance with the probable terms set out in such certificate and such terms shall be used for purposes of calculating Aggregate Annual Debt Service;

(iv) if any Outstanding Bonds or any Bonds which are then proposed to be issued constitute Tender Indebtedness (but excluding Bonds as to which a Qualified Swap is in effect and to which clause (vi) of this subsection (c) applies), then, for purposes of determining Aggregate Annual Debt Service, Tender Indebtedness shall be treated as if the principal amount of such Bonds were to be amortized over a term of not more than 30 years commencing in the year in which such Series is first subject to tender and with substantially level Annual Debt Service payments and extending not later than 30 years from the date such Tender Indebtedness was originally issued; the interest rate used for such computation shall be that rate determined by a Consultant to be a reasonable market rate for fixed-rate Bonds of a corresponding term issued under this Indenture on the date of such calculation, 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; and with respect to all funding requirements of principal and interest payments becoming due prior to the year in which such Tender Indebtedness is first subject to tender, such payments shall be treated as described in clause (i) of this subsection (c) unless the interest during that period is subject to fluctuation, in which case the interest becoming due prior to such first tender date shall be determined as provided in clause (iv) of this subsection (c);

(v) if any Outstanding Bonds or any Bonds which are then proposed to be issued constitute Variable Rate Indebtedness, including obligations described in clause (vi)(B) of this subsection (c) to the extent it applies (except to the extent clause (ii) of this subsection (c) relating to Balloon Indebtedness or clause (iii) of this subsection (c) relating to Tender Indebtedness or clause (vi)(A) of this subsection (c) relating to Synthetic Fixed Rate Debt applies), the interest rate on such Bonds shall be that rate determined by a Consultant to be a reasonable market rate for variable rate Bonds of a corresponding term and structure issued under this Indenture on the date of such calculation, with credit enhancement (taking into consideration whether such Bonds bear interest which is or is not excluded from gross income for federal income tax purposes), plus the costs of the credit enhancement;

(vi) debt service on Repayment Obligations, to the extent such obligations constitute Bonds under Section 2.13 hereof, shall be calculated as provided in Section 2.13 hereof;

(vii) (A) for purposes of computing the Aggregate Annual Debt Service of Bonds which constitute Synthetic Fixed Rate Debt, the interest rate on such Bonds shall be that rate as provided for by the terms of the Swap;

(B) for purposes of computing the Aggregate Annual Debt Service of Bonds with respect to which a Swap has been entered into whereby the Authority has agreed to pay the floating variable rate thereunder, no fixed interest rate amounts payable on the Bonds to which such Swap pertains shall be included in the calculation of Aggregate Annual Debt Service, and the interest rate with respect to such Bonds shall be the sum of that rate as determined in accordance with clause (iv) of this subsection (c) relating to Variable Rate Indebtedness plus the difference between the interest rate on the Designated Debt and the rate received from the Swap Provider; and

(viii) with respect to Commercial Paper, the principal and interest thereon shall be calculated as if the entire maximum principal amount of such Commercial Paper authorized by a resolution or a Supplemental Indenture were to be amortized over a term of 30 years commencing in the year in which such program authorizing Commercial Paper is implemented and with substantially level Annual Debt Service payments; the interest rate used for such computation shall be that rate determined by a Consultant to be a reasonable market rate for fixed rate Bonds of a corresponding term issued under this Indenture on the date of such calculation, 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.

When calculating Aggregate Annual Debt Service for purposes of this Section 2.11, Aggregate Annual Debt Service shall be reduced by the amount of principal and/or interest paid or to be paid with Capitalized Interest and PFCs Available for Debt Service.

Section 2.12. Repayment Obligations Afforded Status of Bonds. If a Credit Provider or Liquidity Provider makes payment of principal of and interest on a Bond or advances funds to purchase or provide for the purchase of Bonds and is entitled to reimbursement thereof, pursuant to a separate written agreement with the Authority, but is not reimbursed, the Authority's Repayment Obligation, or portion thereof, under such written agreement may, if so provided in the written agreement, be afforded the status of a Bond issued under this Article II, and, if afforded such status, the Credit Provider or Liquidity Provider shall be the Bondholder and such Bond shall be deemed to have been issued at the time of the original Bond for which the Credit Facility or Liquidity Facility was provided and will not be subject to the provisions of Sections 2.09 through 2.11 hereof; provided, however, for purposes of Section 2.11(c)(vi) hereof, notwithstanding the stated terms of the Repayment Obligation, the payment terms of the Bond held by the Credit Provider or Liquidity Provider hereunder shall be as follows (unless otherwise provided in the written agreement with the Authority or a Supplemental Indenture pursuant to which the Bonds are issued): (a) interest shall be due and payable semiannually and (b) principal shall be due and payable not less frequently than annually and in such annual amounts as to amortize the principal amount thereof in (i) 30 years or, if shorter, (ii)(A) a term extending to the maturity date of the enhanced Bonds or (B) if longer, the final maturity of the Repayment Obligation under the written agreement, and providing substantially level Annual Debt Service payments. The principal amortized as described in the prior sentence shall bear interest in accordance with the terms of the Repayment Obligation. The Authority may provide that any amount which comes due on the Repayment Obligation by its terms and which is in excess of the amount treated as principal of and interest on a Bond may be treated as a Subordinate Obligation of the Authority or payable from amounts on deposit in the Coverage Account. This provision shall not defeat or alter the rights of subrogation which any Credit Provider or Liquidity Provider may have under law or under the terms of any Supplemental Indenture. The Trustee may conclusively rely on a written certification by the Credit Provider or Liquidity Provider of the amount of such non-reimbursement and that such Repayment Obligation is to be afforded the status of a Bond under this Indenture.

Section 2.13. Obligations Under Qualified Swap.

(a) The obligation of the Authority to make Regularly Scheduled Swap Payments under a Qualified Swap with respect to a Series of Bonds may be on a parity with the obligation of the Authority to make payments with respect to such Series of Bonds and other Bonds under this Indenture, except as otherwise provided herein or in a Supplemental Indenture. The Authority may provide in any Supplemental Indenture that Regularly Scheduled Swap Payments under a Qualified Swap shall be secured by a pledge of or lien on Net Revenues on a parity with the Bonds of such Series and all other Bonds, regardless of the principal amount, if any, of the Bonds of such Series remaining Outstanding. The Trustee shall take all action consistent with the other provisions hereof as shall be requested in writing by the Qualified Swap Provider necessary to preserve and protect such pledge, lien and assignment and to enforce the obligations of the Authority with respect thereto. In the event the action requested to be taken pursuant to the preceding sentence shall require the Trustee either to exercise the remedies granted in this Indenture or to institute any action, suit or proceeding in its own name, the Qualified Swap Provider shall provide to the Trustee reasonable security and indemnity against the costs, expenses and liabilities to be incurred in connection therewith.

(b) In the event that a Swap Termination Payment or any other amounts other than as described in clause (a) above are due and payable by the Authority under a Qualified Swap, such Swap Termination Payment and any such other amounts shall constitute a Subordinate Obligation hereunder.

ARTICLE III

REDEMPTION OF BONDS

Bonds may be subject to redemption either in whole or in part and at such times, prices and in such order and under such terms as may be provided by the Supplemental Indenture providing for the issuance of such Bonds. The Authority may provide for the redemption of Bonds from any funds available to the Authority and not obligated for other purposes.

In connection with the partial early redemption of any Term Bonds of a Series, the Authority may, in any Supplemental Indenture, provide that the principal amount of Bonds of such Series being redeemed shall be allocated against its scheduled sinking fund redemption and modify its scheduled sinking fund installments payable thereafter as to the Outstanding Term Bonds of such Series in any manner the Authority may determine. The Authority may provide in any Supplemental Indenture that, prior to notice of redemption for any Bonds of a Series, moneys in the Debt Service Fund, any Common Debt Service Reserve Account, and any Series Debt Service Reserve Account relating to such Series of Bonds may be applied at the direction of the Authority to the purchase of Bonds of such Series and, if any such purchased Bonds are Term Bonds, the Authority may allocate the principal amount of Bonds of such Series being redeemed against its scheduled sinking fund redemption for such Bonds and may modify its scheduled sinking fund installment payments thereafter payable with respect to Bonds of such Series in any manner the Authority may determine.

The Authority may provide that, if at the time of mailing of notice of an optional redemption there shall not have been deposited with the Trustee moneys sufficient to redeem all the Bonds called for redemption, such notice may state that it is conditional, that is, subject to the deposit of the redemption moneys with the Trustee not later than the opening of business one (1) Business Day prior to the scheduled redemption date, and such notice shall be of no effect unless such moneys are so deposited. In the event sufficient moneys are not on deposit on the required date, then the redemption shall be canceled and on such cancellation date notice shall be mailed to the Holders of such Bonds of the cancellation in the manner provided in this Section.

ARTICLE IV

REVENUES; FUNDS AND ACCOUNTS

Section 4.01. Bonds Secured by a Pledge and Lien on Net Revenues. Bonds authorized and issued under the provisions of this Indenture shall be secured as provided in the Granting Clauses of this Indenture and the granting clause(s) set forth in any Supplemental Indenture. The Authority hereby represents and states that it has not previously created any charge or lien on or any security interest in the Revenues or the Net Revenues and the Authority covenants that, until all the Bonds authorized and issued under the provisions of this Indenture and the interest thereon shall have been paid or are deemed to have been paid, it will not, except as otherwise provided under this Indenture, grant any prior or parity pledge of or any security interest in the Net Revenues or any other security which is pledged pursuant to the Granting Clauses of this Indenture, or create or permit to be created any charge or lien thereon or any security interest therein ranking prior to or on a parity with the charge or lien of the Bonds from time to time Outstanding under this Indenture. The Authority may, as provided in and as limited by Section 5.06 hereof, grant a lien on or security interest in the Revenues remaining after the deposits to the Funds, Accounts and Subaccounts set forth in Section 4.03(b)(i) through (iii) hereof to secure Subordinate Obligations.

Section 4.02. Perfection of Security Interest.

(a) This Indenture creates a valid and binding pledge and assignment of and security interest in all of the Net Revenues pledged under this Indenture in favor of the Trustee as security for payment of the Bonds, enforceable by the Trustee in accordance with the terms thereof.

(b) Under the laws of the Commonwealth, such pledge and assignment and security interest is automatically perfected by 13 Pa.C.S. Section 9308 *et seq*., as amended, on and as of the effective date of this Indenture, and is and shall have priority as against all parties having claims of any kind in tort, contract, or otherwise against the Authority with respect to the Net Revenues.

Section 4.03. Receipt, Deposit and Use of Revenues — Revenue Fund

(a) The Authority hereby covenants and agrees to establish, hold and maintain the Revenue Fund. The Authority hereby further covenants and agrees that, as long as there are any Bonds Outstanding, all Revenues, when and as received, shall be deposited by the Authority in the Revenue Fund.

(b) All Revenues in the Revenue Fund shall be set aside for the payment of the following amounts or deposited or transferred to the following Funds, Accounts and Subaccounts in the following order of priority:

(i) *First - Operation and Maintenance Fund*. On or prior to the tenth (10^{th}) Business Day of each month, the Authority shall deposit Revenues to the Operation and Maintenance Fund in an amount projected to be required to pay Operation and Maintenance Expenses for that month as set forth in the budget of the Authority for such Fiscal Year as finally approved by the Authority. In the event that the balance in the Operation and Maintenance Fund at any time is insufficient to make any required payments therefrom due and payable, additional Revenues at least sufficient to make such payments shall immediately be transferred to the Operation and Maintenance Fund from the Revenue Fund or Operation and Maintenance Reserve Account.

(ii) *Second - Debt Service Funds*. On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred by the Authority, without priority and on an equal basis, except as to timing of payment, to the Trustee for deposit to the Debt Service Funds in the amounts, at the times and in the manner provided in Section 4.05 hereof to provide for the payment of principal and interest to become due on the Outstanding Bonds. In addition to the deposit of Revenues to the Debt Service Funds, the Authority shall deposit any applicable PFCs Available for Debt Service with the Trustee for deposit to the applicable Debt Service Fund(s) in accordance with the provisions of the applicable Supplemental Indenture and/or the applicable certificate described in Section 4.17 hereof.

(iii) *Third - Debt Service Reserve Fund.* On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred by the Authority, without priority and on an equal basis, to the Trustee for deposit to the Debt Service Reserve Fund at the times and in the amounts provided in Sections 4.06 hereof, and immediately thereafter transferred to the Common Debt Service Reserve Account and any Series Debt Service Reserve Account, as applicable, at the times and in the amounts set forth in any Supplemental Indenture.

(iv) *Fourth - Subordinate Obligation Debt Service Funds*. On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred by the Authority to the Trustee, in such amounts and at such times (as specified by the Authority), as shall be necessary to make all payments and deposits required to be made during the following month on all Subordinate Obligations.

(v) *Fifth - Subordinate Obligation Debt Service Reserve Funds*. On or prior to the tenth (10th) Business Day of each month, a sufficient amount of Revenues shall be transferred or caused to be transferred by the Authority to the Trustee (in such amounts and at such times as specified in a Supplemental Indenture or other written instrument authorizing the issuance of any Subordinate Obligations) to fund any deficiency in any debt service reserve fund established by or for the benefit of the Authority in connection with any Subordinate Obligations issued, provided, however, no Revenues shall be transferred by the Authority to the Trustee for deposit to any debt service reserve fund established by or for the benefit of the Authority in connection with any Subordinate Obligations if amounts (including any Debt Service Reserve Fund Surety Policy) in the Common Debt Service Reserve Account are not sufficient to meet the

Reserve Requirement for such Common Debt Service Reserve Account or amounts (including any Debt Service Reserve Fund Surety Policy) in any Series Debt Service Reserve Account are not sufficient to meet the applicable Reserve Requirement for such Series Debt Service Reserve Account.

(vi) *Sixth - Operation and Maintenance Reserve Account*. On or prior to the tenth (10^{th}) Business Day of each month, sufficient Revenues shall be deposited to the Operation and Maintenance Reserve Account to fund any deficiency in the Operation and Maintenance Reserve Account in accordance with Section 4.07 hereof.

(vii) *Seventh - Renewal and Replacement Fund*. On or prior to the tenth (10^{th}) Business Day of each month, sufficient Revenues shall be deposited to the Renewal and Replacement Fund to fund any deficiency in the Renewal and Replacement Fund in accordance with Section 4.08 hereof.

(viii) *Eighth – Equipment and Capital Outlay Fund*. On or prior to the tenth (10^{th}) Business Day of each month, at the discretion of the Authority, Revenues may be deposited to the Equipment and Capital Outlay Fund in an amount determined by the Authority to fund the Equipment and Capital Outlay Fund in accordance with Section 4.09 hereof.

(ix) *Ninth - Coverage Account*. On or prior to the tenth (10^{th}) Business Day of each month, at the discretion of the Authority, Revenues may be deposited to the Coverage Account in an amount determined by the Authority to fund the Coverage Account in accordance with Section 4.10 hereof.

(x) *Tenth – Rate Stabilization Fund*. On or prior to the tenth (10^{th}) Business Day of each month, at the discretion of the Authority, Revenues may be deposited to the Rate Stabilization Fund in an amount determined by the Authority to fund the Rate Stabilization Fund in accordance with Section 4.11 hereof.

(xi) *Eleventh – Airport System Capital Fund*. After all deposits and payments have been made as described in clauses (i) through (vii) above, the Authority, may from time to time, at its discretion, deposit all or a portion of the remaining Revenues in the Revenue Fund to the Airport System Capital Fund and apply such Revenues to the purposes set forth in Section 4.12 hereof.

(c) The Authority reserves the right to amend, without Bondholder consent, the application of the funds as provided in subsections (b)(vi) through (b)(xi) above and to create additional funds and accounts to be inserted below subsection (b)(v) above. The Authority covenants that no such modifications will violate the provisions and order of payment set forth in subsections (b)(i) through (b)(v) above or the provisions of any other contracts or agreements of the Authority or any legal requirements otherwise applicable to the use of such moneys.

Section 4.04. Operation and Maintenance Fund. The Authority shall establish, hold and maintain a special Fund to be designated as the "Operation and Maintenance Fund." All amounts in the Operation and Maintenance Fund shall be used and applied by the Authority to pay Operation and Maintenance Expenses as the same may become due. Moneys in the Operation and Maintenance Fund do not constitute Net Revenues and are not pledged to the payment of, nor shall they be applied to pay, the principal of and/or interest on the Bonds. Amounts on deposit in the Operation and Maintenance Fund may be invested in Permitted Investments and earnings on such amounts shall be retained in the Operation and Maintenance Fund and used to pay Operation and Maintenance Expenses.

Section 4.05. Debt Service Funds. At the time of issuance of each Series of Bonds, the Authority shall create or shall cause to be created a Debt Service Fund for such Series, which Debt Service Fund shall be held and maintained by the Trustee or any agent of the Trustee, and amounts to be used to pay the principal and redemption price, if any, of and interest on such Series, as received by the Trustee or its agent, shall be deposited therein and used for such purpose. Accounts and Subaccounts shall be created in the various Debt Service Funds and shall be held and maintained by the Trustee or such agents as shall be provided in a Supplemental Indenture.

The moneys in the Debt Service Funds shall be held in trust and applied as provided in the Supplemental Indenture with regard to each such Fund, and pending such application on the applicable Payment Date, such amounts shall be subject to a lien on and security interest in favor of the holders of the Bonds issued and Outstanding under this Indenture.

The Trustee shall, at least five (5) Business Days prior to each Payment Date on any Bond, give the Authority notice by telephone, promptly confirmed in writing, of the amount, if any, (after taking into account any Capitalized Interest, PFCs Available for Debt Service, and other amounts on deposit in the Debt Service Fund) required to be deposited with the Trustee to make each required payment of principal and interest due on such Payment Date. With respect to any Series of Bonds, the Supplemental Indenture under which such Bonds are issued may provide for different times and methods of notifying the Authority of Payment Dates and amounts to accommodate the specific provisions of such Series and, in such event, the terms of such Supplemental Indenture shall control.

Except as otherwise provided in a Supplemental Indenture, so long as any Bonds are Outstanding, not later than the tenth (10th) Business Day of each month, the Authority shall pay to the Trustee (a) Revenues to be withdrawn from the Revenue Fund, and (b) PFCs Available for Debt Service (excluding any interest and earnings from the account maintaining such PFCs Available for Debt Service) in an aggregate amount equal to: (i) one-sixth (1/6) of the full amount required to pay the interest on each Series of Outstanding Bonds, as it becomes due, so that at least the full amount of interest on each such Series of Outstanding Bonds shall be set aside in the applicable Debt Service Fund by not later than the fifteenth (15^{th}) day of the month prior to the date each installment of interest becomes due; (ii) one-twelfth (1/12) of the full amount required to pay the Principal Amount of each Series of Outstanding Bonds due on the next principal payment date so that at least the full amount of the Principal Amount of each such Series of Outstanding Bonds shall be set aside in the applicable Debt Service Fund by not later than the fifteenth (15^{th}) day of the month prior to the date such Principal Amount becomes due;

and (iii) one-twelfth (1/12) of the full amount required to pay, as it becomes due, the sinking fund installment payment, if any, due with respect each Series of Outstanding Term Bonds, so that at least the full amount of the sinking fund installment payment of each such Series of Outstanding Term Bonds shall be set aside in the applicable Debt Service Fund by not later than the fifteenth (15^{th}) day of the month prior to the date such sinking fund installment payment becomes due.

No such transfer need be made in respect of any Series of Outstanding Bonds prior to the actual delivery of that Series of Outstanding Bonds to the purchasers thereof; provided, however, that notwithstanding the previous paragraph, if the first interest payment date for a Series of Bonds occurs less than six months after the issuance of such Series of Bonds, the Authority shall pay to the Trustee (a) Revenues to be withdrawn from the Revenue Fund, and (b) PFCs Available for Debt Service, if any, for deposit in the Debt Service Fund established for that Series of Bonds, equal monthly sums at least sufficient together with other transfers required to be made, commencing not later than the tenth (10th) Business Day of the month immediately succeeding the issuance of such Series of Bonds, so that interest due on such Series of Bonds on the first interest payment date to occur after the issuance of such Series Bonds shall be fully funded when the first installment of interest is due on such Series of Bonds, and, if the first principal payment or sinking fund installment of such Series of Bonds is due less than twelve months after the issuance of such Series of Bonds, the Authority shall pay to the Trustee (a) Revenues to be withdrawn from the Revenue Fund, and (b) PFCs Available for Debt Service, if any, for deposit in the Debt Service Fund established for that Series of Bonds, equal monthly sums at least sufficient together with other transfers required to be made, commencing not later than the tenth (10th) Business Day of the month immediately succeeding the issuance of such Series of Bonds, so that principal or sinking fund installments of such Series of Bonds due on the first principal payment date to occur after the issuance of such Series of Bonds shall be fully funded when the first principal payment or sinking fund installment is due on such Series of Bonds.

Notwithstanding any of the foregoing provisions of the previous two paragraphs, the Authority shall not be required to pay to the Trustee, for deposit to the Debt Service Fund(s) for each Series of Outstanding Bonds (a) Revenues from the Revenue Fund, and (b) PFCs Available for Debt Service, if any, for the payment of principal or sinking fund installments or interest, respectively, if the amount already on deposit in such Debt Service Fund(s) and available for such purpose is sufficient to pay in full the amount of principal or sinking fund installment and/or interest, respectively, coming due on such Bonds on the next succeeding Payment Date.

On any day on which the Trustee receives funds from the Authority to be used to pay principal of or interest on Bonds, the Trustee shall, if the amount received is fully sufficient to pay all amounts of principal and interest then due or becoming due on the next Payment Date, deposit such amounts into the respective Debt Service Funds for the Series of Bonds for which such payments were made and any excess shall be applied to pay all amounts of principal and interest becoming due on any subsequent Payment Dates. If, on any Payment Date, the Trustee does not have sufficient amounts in the Debt Service Funds (without regard to any amounts which may be available from the Common Debt Service Reserve Account or any Series Debt Service Reserve Account, as applicable) to pay in full all amounts of principal and/or interest due on such date, the Trustee shall allocate the total amount which is available to make payment on such day (without regard to any amounts in the Common Debt Service Reserve Account or any Series Debt Service Reserve Account, as applicable) as follows: first to the payment of interest then due on the Bonds and, if the amount available shall not be sufficient to pay in full all interest on the Bonds then due, then pro rata among the Series according to the amount of interest then due, and second to the payment of principal then due on the Bonds and, if the amount available shall not be sufficient to pay in full all principal on the Bonds then due, then pro rata among the Series according to the Principal Amount then due on the Bonds.

Notwithstanding the foregoing, the Authority may, in the Supplemental Indenture authorizing such Series of Bonds, provide for different provisions and timing of deposits with the Trustee and different methods of paying principal of or interest on such Bonds depending upon the terms of such Bonds and may provide for payment through a Credit Facility with reimbursement to the Credit Provider from the respective Debt Service Fund created for the Series of Bonds for which such Credit Facility is provided. The Authority may provide in any Supplemental Indenture that, as to any Series of Bonds Outstanding, any amounts required to be transferred to and paid into a Debt Service Fund may be prepaid, in whole or in part, by being earlier transferred to and paid into that Debt Service Fund, and in that event any subsequently scheduled monthly transfer, or any part thereof, which has been so prepaid need not be made at the time appointed therefor.

On each Payment Date for any Outstanding Bonds, the Trustee shall pay to the Owners of the Bonds of a given Series from the appropriate Debt Service Fund or Debt Service Funds, an amount equal to the principal and/or interest becoming due on such Series of Bonds.

The payments made by the Trustee in this Section shall be made solely to the extent that moneys are on deposit in the appropriate Debt Service Fund.

If Revenues, and PFCs Available for Debt Service, if any, are at any time insufficient to make the required deposits to the Debt Service Funds to make payments on the Bonds, the Authority may, at its election, pay to the Trustee funds from any available sources with the direction that such funds be deposited into the Debt Service Funds or into a specified Account or Accounts or Subaccount or Subaccounts therein.

Section 4.06. Debt Service Reserve Fund.

(a) The Authority shall create or shall cause to be created the Debt Service Reserve Fund, which Debt Service Reserve Fund shall be held and maintained by the Trustee or any agent of the Trustee. The Debt Service Fund may contain a Common Debt Service Reserve Account and one or more Series Debt Service Reserve Accounts. The Common Debt Service Reserve Account shall secure each Series of Bonds that the Authority elects, pursuant to a Supplemental Indenture, to have participate in the Common Debt Service Reserve Account. The Authority reserves the right, in its discretion, (i) to allow any Series of Bonds to participate in the Common Debt Service Reserve Account, or (ii) to create, pursuant to Supplemental Indentures, separate Series Debt Service Reserve Accounts and allow one or more Series of Bonds to participate in such Series Debt Service Reserve Accounts, or (iii) to provide that a Series of Bonds not participate in the Common Debt Service Reserve Account or any Series Debt Service

Reserve Account. Any Series Debt Service Reserve Account established under a Supplemental Indenture shall be funded in an amount equal to the applicable Reserve Requirement set forth in such Supplemental Indenture. Additionally, such Supplemental Indenture shall provide for the manner of funding and replenishing of such Series Debt Service Reserve Account and establish such other terms with respect to such Series Debt Service Reserve Account as the Authority may deem to be appropriate, including providing a Debt Service Reserve Fund Surety Policy in lieu thereof.

(b) (i) Except as otherwise provided herein, with respect to Bonds participating in the Common Debt Service Reserve Account, each Supplemental Indenture providing for the issuance such Bonds shall require as a condition of issuance that at the time of issuance of such Bonds an amount be deposited in the Common Debt Service Reserve Account so that, together with any Debt Service Reserve Fund Surety Policy provided pursuant to clause (c) below, the amount on deposit in the Common Debt Service Reserve Account will be equal to the Reserve Requirement for the Common Debt Service Reserve Account. Any cash to be deposited in the Common Debt Service Reserve Account may be derived from proceeds of Bonds or any other legally available source of funds. In the event that federal tax law in the opinion of Bond Counsel would prohibit the Reserve Requirement with respect to the Common Debt Service Reserve Account or any portion thereof from being satisfied with proceeds of any issue of tax-exempt Bonds, the Authority shall be permitted to satisfy the portion of the Reserve Requirement for the Common Debt Service Reserve Account not permitted to be funded with tax-exempt Bond proceeds with Revenues as described in Section 4.03(b)(iii) hereof, to the extent permissible under federal tax laws, in equal monthly installments within sixty (60) months from the date of issuance of said Series of Bonds.

(ii) Moneys held in the Common Debt Service Reserve Account shall be used for the purpose of paying principal of and interest on the Bonds participating in the Common Debt Service Reserve Account on a basis *pari passu* with all Bonds then participating in the Common Debt Service Reserve Account. If, on any Payment Date for Bonds participating in the Common Debt Service Reserve Account, the amounts in the Debt Service Funds for such Bonds are insufficient to pay in full the amount then due on such Bonds, moneys held in the Common Debt Service Reserve Account shall be used for the payment of the principal of and/or interest thereon as provided in Section 4.05 hereof. If amounts in the Common Debt Service Reserve Account consist of both cash and one or more Debt Service Reserve Fund Surety Policies, the Trustee shall make any required payments of amounts in the Common Debt Service Reserve Account first from any cash on deposit in the Common Debt Service Reserve Account, prior to making a draw upon any Debt Service Reserve Fund Surety Policy. Moneys held in the Common Debt Service Reserve Account also may be used to make any deposit required to be made to the Rebate Fund created for the Bonds participating in the Common Debt Service Reserve Account at the written direction of the Authority if the Authority does not have other funds available from which such deposit can be made.

(iii) Subject to the provisions of subsection (b)(i) above, the Trustee shall annually, prior to January 1 of each year and at such other times as the Authority shall request, value the Common Debt Service Reserve Account on the basis of the cost thereof, plus accrued interest, adjusted for any amortization of premium or discount on the investment thereof. For purposes of determining the amount on deposit in the Common Debt Service Reserve Account, any Debt Service Reserve Fund Surety Policy held by, or the benefit of which is available to, the Trustee as security for the Bonds participating in the Common Debt Service Reserve Account shall be deemed to be a deposit in the face amount of such Debt Service Reserve Fund Surety Policy or the stated amount of such Debt Service Reserve Fund Surety Policy provided, except that, if the amount available under a Debt Service Reserve Fund Surety Policy has been reduced as a result of a payment having been made thereunder or as a result of the termination, cancellation or failure of such Debt Service Reserve Fund Surety Policy and not reinstated or another Debt Service Reserve Fund Surety Policy provided, then, in valuing the Common Debt Service Reserve Account, the value of such Debt Service Reserve Fund Surety Policy shall be reduced accordingly. Upon each such valuation, the Trustee shall prepare a written certificate setting forth the Reserve Requirement with respect to the Common Debt Service Reserve Account as of such valuation date and the value of the Common Debt Service Reserve Account and deliver a copy thereof to the Chief Financial Officer. If, upon any valuation of the Common Debt Service Reserve Account, the value of the Common Debt Service Reserve Account exceeds the Reserve Requirement with respect to the Common Debt Service Reserve Account, the excess amount may be withdrawn and paid to the Authority to be used for any lawful purpose; provided that, if such amounts are used for a purpose other than payment of the principal of Bonds participating in the Common Debt Service Reserve Account, there shall be delivered to the Trustee with the request for such funds an Opinion of Bond Counsel that the purpose for which such funds are to be used is a lawful purpose for which such proceeds may be used by the Authority and that such use shall not result in the inclusion of interest on any tax-exempt Bonds in gross income of the recipient thereof for federal income tax purposes. If, upon any valuation of the Common Debt Service Reserve Account, the value is less than the Reserve Requirement with respect to the Common Debt Service Reserve Account, the Authority shall replenish such amounts within thirty-six (36) months after the date of such valuation, in accordance with subsection (f) below.

(c) A Debt Service Reserve Fund Surety Policy shall be acceptable in lieu of a deposit of cash or securities into the Common Debt Service Reserve Account, or may be substituted for amounts on deposit in the Common Debt Service Reserve Account, only if at the time of such deposit the face amount of the Debt Service Reserve Fund Surety Policy, together with amounts on deposit in the Common Debt Service Reserve Account is at least equal to the Reserve Requirement with respect to the Common Debt Service Reserve Account.

(d) Moneys in the Common Debt Service Reserve Account shall be invested and reinvested by the Trustee at the written direction of the Authorized Authority

Representative in Permitted Investments. Investments in the Common Debt Service Reserve Account shall not have maturities which extend beyond five years. Earnings on the Common Debt Service Reserve Account shall be paid pro rata to the Debt Service Funds for the Bonds participating in the Common Debt Service Reserve Account to be applied as a credit against the Authority's obligation to make its next interest payments unless an amount has been withdrawn from the Common Debt Service Reserve Account as a result of a deficiency in the Debt Service Funds and such withdrawal has not been repaid or, as of the most recent valuation of the Common Debt Service Reserve Account, the amount therein was valued at less than the Reserve Requirement with respect to the Common Debt Service Reserve Account and the deficiency has not yet been restored, in either of which events the earnings shall be retained in the Common Debt Service Reserve Account until the deficiency therein has been eliminated.

(e) All money remaining in the Common Debt Service Reserve Account on the final Payment Date of the Bonds participating in the Common Debt Service Reserve Account in excess of the amount required to make provisions for the payment in full of the interest and/or the principal of the Bonds of all Outstanding Series participating in the Common Debt Service Reserve Account shall be transferred to the Authority for deposit in the Revenue Fund.

(f) If the Common Debt Service Reserve Account or a separately created Series Debt Service Reserve Account (or Debt Service Reserve Fund Surety Policy provided in lieu thereof) have been used to make payments on Bonds secured thereby, then the Authority may be required to replenish the Common Debt Service Reserve Account and such Series Debt Service Reserve Account or reimburse the Credit Provider from Net Revenues as provided in Section 4.03(b)(iii) hereof, the full amount so withdrawn, together with interest, if any, required under the terms of the Debt Service Reserve Fund Surety Policy, or so much as shall be required to restore the Common Debt Service Reserve Account or any Series Debt Service Reserve Account to the Reserve Requirement with respect to the Common Debt Service Reserve Account or such Series Debt Service Reserve Account and to pay such interest, if any provided that (i) no amount from Revenues may be used for such purpose until all payments of principal of and/or interest on all Bonds which have become due and payable shall have been paid in full, (ii) the required payments to replenish the Common Debt Service Reserve Account or any such Series Debt Service Reserve Account or reimburse the Credit Provider shall be due in no more than thirty-six (36) substantially equal monthly installments commencing in the month following any such withdrawal, and (iii) if the aggregate amount of payments due on any date to replenish the Common Debt Service Reserve Account or any Series Debt Service Reserve Account exceeds the amount available for such purpose, the payments made to the Trustee for such purpose shall be allocated among the Common Debt Service Reserve Account and any Series Debt Service Reserve Account pro rata on the basis of the Outstanding Principal Amount of Bonds secured thereby. If such repayment is with respect to a draw under a Debt Service Reserve Fund Surety Policy, the Trustee shall pay to the provider of such Debt Service Reserve Fund Surety Policy the amount received by the Trustee from the Authority which is designated to be used to reimburse the provider of such Debt Service Reserve Fund Surety Policy. The Trustee shall immediately notify the paying agent for the Debt Service Reserve Fund

Surety Policy, if any, of such reimbursement, and the amount available to be drawn under the Debt Service Reserve Fund Surety Policy shall increase by the amount of such reimbursement.

Section 4.07. Operation and Maintenance Reserve Account. The Authority shall create, hold and maintain, within the Operation and Maintenance Fund, a special Account to be designated as the "Operation and Maintenance Reserve Account." Upon adoption of the annual budget of the Authority for Operation and Maintenance Expenses, the Authority shall calculate the Operation and Maintenance Reserve Account Requirement. To the extent amounts on deposit in the Operation and Maintenance Reserve Account exceed the Operation and Maintenance Reserve Account Requirement on the date of any such calculation, the Authority may transfer such excess to the Revenue Fund. Except in the case of a Force Majeure Event, to the extent amounts on deposit in the Operation and Maintenance Reserve Account on the date of any such calculation are less than the Operation and Maintenance Reserve Account Requirement, the Authority shall deposit monthly in the Operation and Maintenance Reserve Account an amount equal to one-twelfth (1/12th) of the difference between the amount on deposit in the Operation and Maintenance Reserve Account and the Operation and Maintenance Reserve Account Requirement. The Authority shall deposit such additional amount monthly into the Operation and Maintenance Reserve Account until the balance in the Account is at least equal to the Operation and Maintenance Reserve Account Requirement.

In the event of any withdrawal from the Operation and Maintenance Reserve Account, other than a withdrawal of excess deposits as permitted pursuant to the immediately preceding paragraph and except in the case of a Force Majeure Event, the Authority shall deposit monthly in the Operation and Maintenance Reserve Account an amount equal to one-twelfth (1/12th) of the aggregate amount of such withdrawal until the balance in the Operation and Maintenance Reserve Account is at least equal to the Operation and Maintenance Reserve Account Requirement. In the event of any withdrawal from the Operation and Maintenance Reserve Account in the case of a Force Majeure Event, the Authority shall deposit monthly in the Operation and Maintenance Reserve Account an amount equal to one-thirty sixth (1/36th) of the aggregate amount of such withdrawal until the balance in the Operation and Maintenance Reserve Account is at least equal to the Operation and Maintenance Reserve Account Requirement.

All amounts in the Operation and Maintenance Reserve Account shall be used and applied by the Authority (a) to pay Operation and Maintenance Expenses, (b) to make any required payments or deposits to pay or secure the payment of the principal of and/or interest on the Bonds, and (c) to pay the costs of any additions, improvements, repairs, renewals or replacements to the Airport System, in each case only if and to the extent that moneys otherwise available to make such payments or deposits are insufficient.

Section 4.08. Renewal and Replacement Fund. The Authority shall create, hold and maintain a special Fund to be designated as the "Renewal and Replacement Fund." The Authority shall fund the Renewal and Replacement Fund in an amount equal to the Renewal and Replacement Fund Requirement. To the extent amounts on deposit in the Renewal and Replacement Fund on the date of any calculation are less than the Renewal and Replacement Fund Requirement, the Authority shall deposit monthly in the Renewal and Replacement Fund an amount equal to one-twelfth ($1/12^{th}$) of the aggregate amount of any such deficiency until the balance in the Renewal and Replacement Fund is at least equal to the Renewal and Replacement Fund Requirement.

All amounts in the Renewal and Replacement Fund shall be used and applied by the Authority (a) to pay the costs of any extraordinary repairs, renewals or replacements to the Airport System, and (b) to make any required payments or deposits to pay or secure the payment of the principal of and/or interest on the Bonds, in each case only if and to the extent that moneys otherwise available to make such payments or deposits are insufficient.

Section 4.09. Equipment and Capital Outlay Fund. The Authority may create, hold and maintain a special Fund to be designated the "Equipment and Capital Outlay Fund." Moneys deposited to the Equipment and Capital Outlay Fund shall be used for any lawful purpose of the Authority, but only to the extent any such purposes are provided for in the Airline Operating Agreements.

Section 4.10. Coverage Account. The Authority may create, hold and maintain, within the Revenue Fund, a special Account to be designated as the "Coverage Account." If such Account is created, the Authority may fund the Coverage Account in an amount to be determined by the Authority but not in excess of the limitations set forth in the definition of Coverage Amount. Moneys deposited in the Coverage Account shall be applied upon the direction of an Authorized Authority Representative to (a) pay Operation and Maintenance Expenses, (b) make any required payments or deposits to pay or secure the payment of the principal and/or interest on the Bonds and Subordinate Obligations, and (c) pay the cost of any additions, improvements, repairs, renewals or replacements to the Airport System, in each case only if and to the extent that moneys otherwise available to make such payments or deposits are insufficient therefor.

Section 4.11. Rate Stabilization Fund. The Authority hereby covenants and agrees to, create, hold and maintain the "Rate Stabilization Fund." Moneys deposited to the Rate Stabilization Fund that are designated by the Authority to be Other Pledged Revenues shall be transferred to the Revenue Fund. Otherwise the Authority shall not be restricted in using the moneys in the Rate Stabilization Fund for any lawful purpose of the Airport System.

Section 4.12. Airport System Capital Fund. The Authority hereby covenants and agrees to, create, hold and maintain the "Airport System Capital Fund." Moneys deposited to the Airport System Capital Fund shall be used for any lawful purpose of the Authority, but only to the extent any such purposes relate to the Airport System

Section 4.13. Construction Funds. Proceeds of each Series of Bonds which are to be used to pay the Costs of a Project shall be deposited into a Fund (each, respectively, a "***Construction Fund***") to be created by the Authority for such Series of Bonds and held and maintained by the Authority, all as provided by this Indenture or a Supplemental Indenture. All moneys in each Construction Fund shall be held and disbursed as provided in the Supplemental Indenture under which such Fund was created. Notwithstanding this provision, no Construction Fund shall be required for a given Series of Bonds if all of the proceeds thereof (except those deposited into the Common Debt Service Reserve Account or a Series Debt Service Reserve Account or a Debt Service Fund) are spent at the time of issuance of such Series or are used to refund and/or defease Bonds or otherwise the Authority determines that there is no need to create a Construction Fund for such Series.

Section 4.14. Additional Funds, Accounts and Subaccounts. In addition to the Funds, Accounts and Subaccounts described in this Article, the Authority may, pursuant to a Supplemental Indenture, create additional Funds, Accounts and Subaccounts for such purposes as the Authority deems appropriate, including separate Funds, Accounts and Subaccounts available only for specified Bonds or Series of Bonds.

Section 4.15. Moneys Held in Trust for Matured Bonds; Unclaimed Moneys. All moneys which shall have been withdrawn from a Debt Service Fund and set aside or deposited with a Paying Agent for the purpose of paying any of the Bonds, either at the maturity thereof or upon call for redemption, or which are set aside by the Trustee for such purposes and for which Bonds the maturity date or redemption date shall have occurred, shall be held in trust for the respective holders of such Bonds. But any moneys which shall be so set aside or deposited and which shall remain unclaimed by the holders of such Bonds for a period of five (5) years after the date on which such Bonds shall have become due and payable (or such longer period as shall be required by Commonwealth law) shall be paid to the Authority, and thereafter the holders of such Bonds shall look only to the Authority for payment and the Authority shall be obligated to make such payment, but only to the extent of the amounts so received without any interest thereon, and neither the Trustee nor any Paying Agent shall have any responsibility with respect to any of such moneys. The Authority hereby recognizes that while any Bonds are Outstanding in book-entry only form there should be no unclaimed moneys.

Section 4.16. Additional Security. The pledge of Net Revenues and the other security provided in the Granting Clauses hereof, secures all Bonds issued under the terms of this Indenture on an equal and ratable basis, except as to the timing of such payments. The Authority may, however, in its discretion, provide additional security or credit enhancement for specified Bonds or Series of Bonds with no obligation to provide such additional security or credit enhancement to other Bonds.

Section 4.17. PFCs Available for Debt Service. The Authority may for any period elect to designate any available Passenger Facility Charges as "PFCs Available for Debt Service" by filing with the Trustee a certificate signed by an Authorized Authority Representative that includes (a) a representation by the Authority that such Passenger Facility Charges, when received by the Authority, may be validly designated as and included in "PFCs Available for Debt Service" under this Indenture and are legally available to pay the principal of, premium, if any, and interest on all or a portion of the Bonds, (b) the amount of Passenger Facility Charges that are being designated as and included in "PFCs Available for Debt Service," (c) the Debt Service Fund(s) such PFCs Available for Debt Service are to be deposited to, and (d) the time period during which such Passenger Facility Charges will be designated as and included in "PFCs Available for Debt Service." After the filing of such certificate with the Trustee, the Authority shall cause the PFCs Available for Debt Service designated therein to be deposited to the applicable Debt Service Fund(s) and used to pay debt service on the applicable Series of Bonds. Notwithstanding any other provision hereof, if such PFCs Available for Debt Service are subject to any prior pledge or lien or irrevocable commitment, the application thereof to the payment of debt service on the Bonds shall be subordinate to the terms of such pledge or lien or irrevocable commitment and the certificate of the Authorized Authority Representative designating the PFCs Available for Debt Service shall indicate the amount of the obligation payable in such Fiscal Year from the PFCs Available for Debt Service pursuant to such pledge or lien or irrevocable commitment.

Section 4.18. Other Pledged Revenues. The Authority may for any period elect to designate any legally available funds, including but not limited to, all or a portion of Customer Facility Charges, Gaming Revenues and Natural Gas Revenues, as well as moneys transferred from the Rate Stabilization Fund pursuant to Section 4.11 hereof, as "Other Pledged Revenues" by filing with the Trustee a certificate signed by an Authorized Authority Representative that includes (a) a representation by the Authority that such funds, when received by the Authority, may be validly designated as and included in "Other Pledged Revenues" under this Indenture and are legally available to pay expenses of the Authority and/or the principal of, premium, if any, and interest on all or a portion of the Bonds, (b) the amount of funds that are being designated as and included in "Other Pledged Revenues," and (c) the time period during which such funds will be designated as and included in "Other Pledged Revenues." After the filing of such certificate with the Trustee, the Authority shall cause the Other Pledged Revenues designated therein to be deposited into the Revenue Fund. The Authority may, at any time, amend such certification regarding Other Pledged Revenues that has been filed with the Trustee.[3]

ARTICLE V

COVENANTS OF THE AUTHORITY

Section 5.01. Payment of Principal and Interest. The Authority hereby covenants and agrees that it will duly and punctually pay or cause to be paid from the Net Revenues and to the extent thereof the principal of, premium, if any, and interest on every Bond at the place and on the dates and in the manner herein, in the Supplemental Indentures and in the Bonds specified, according to the true intent and meaning thereof, and that it will faithfully do and perform all covenants and agreements herein and in the Bonds contained, provided that the Authority's obligation to make payment of the principal of, premium, if any, and interest on the Bonds shall be limited to payment from the Net Revenues, the funds and accounts pledged therefor in the Granting Clauses of this Indenture and any other source which the Authority may specifically provide for such purpose and no Bondholder shall have any right to enforce payment from any other funds of the Authority.

Section 5.02. Performance of Covenants by Authority; Due Execution. The Authority hereby covenants that it will faithfully perform at all times any and all covenants and agreements contained in this Indenture, in any and every Bond executed, authenticated and delivered hereunder and in all of its proceedings pertaining hereto. The Authority hereby represents that it is duly authorized under the Constitution and laws of the Commonwealth, and

[3] For a description of the amendment to Section 4.18 made by the Second Supplemental Indenture, to become effective upon the issuance of the Series 2021 Bonds, see "AMENDMENTS TO THE MASTER INDENTURE."

the Act to issue Bonds and pledge and grant a security interest in the Net Revenues, and Net Revenues are not currently subject to any existing pledge.

Section 5.03. Senior Lien Obligations Prohibited. The Authority hereby covenants and agrees that so long as any Bonds are Outstanding under this Indenture, it will not issue any bonds or other obligations with a lien on or security interest in nor grant any lien or security interest in Net Revenues which is senior to the Bonds.

Section 5.04. Rate Covenant.

(a) The Authority hereby covenants and agrees that, while any of the Bonds remain Outstanding (but subject to all existing contracts and legal obligations of the Authority as of the date of execution of this Indenture setting forth restrictions relating thereto), it shall establish, fix, prescribe and collect rates, tolls, fees, rentals and charges in connection with the Airport System and for services rendered in connection therewith so that Net Revenues in each Fiscal Year will be at least equal to the following amounts:

(i) the Annual Debt Service on any Outstanding Bonds required to be funded by the Authority in such Fiscal Year as required by this Indenture or any Supplemental Indenture with respect to the Outstanding Bonds as reduced by the amount of principal and/or interest paid with Capitalized Interest and PFCs Available for Debt Service, if any;

(ii) the required deposits to the Common Debt Service Reserve Account or any Series Debt Service Reserve Account which may be established by a Supplemental Indenture;

(iii) the reimbursement owed to any Credit Provider or Liquidity Provider as required by a Supplemental Indenture;

(iv) the interest on and principal of any indebtedness of the Authority with respect to the Airport System required to be funded during such Fiscal Year, other than for Outstanding Bonds, but including Subordinate Obligations; and

(v) funding of any debt service reserve funds created in connection with any indebtedness of the Authority with respect to the Airport System, other than Outstanding Bonds, but including Subordinate Obligations.

(b) In addition to the covenants in subparagraph (a) above, the Authority hereby further covenants and agrees that it shall establish, fix, prescribe and collect rates, tolls, fees, rentals and charges in connection with the Airport System and for services rendered in connection therewith, so that during each Fiscal Year the Net Revenues, and any amounts available in the Coverage Account, will be equal to at least 125% of Annual Debt Service on the Outstanding Bonds for such Fiscal Year, and 100% of the annual debt service with respect to all outstanding Subordinate Obligations. For purposes of this subsection (b), the amount of any transfer from the Coverage Account shall not exceed the Coverage Amount.

(c) When calculating Annual Debt Service on the Outstanding Bonds for purposes of the rate covenants set forth in subsections (a) and (b) above, Annual Debt Service on the Outstanding Bonds shall be reduced by the amount of principal and/or interest paid with Capitalized Interest, and PFCs Available for Debt Service, if any.

(d) The Authority covenants that if, upon the receipt of the audited financial statements for a Fiscal Year, the Net Revenues, together with any amounts available in the Coverage Account, in such Fiscal Year are less than the amounts specified in subsections (a) and (b) above, the Authority will retain and direct a Consultant to make recommendations as to the revision of the Authority's business operations and its schedule of rates, tolls, fees, rentals and charges for the use of the Airport System and for services rendered by the Authority in connection with the Airport System, and after receiving such recommendations or giving reasonable opportunity for such recommendations to be made, the Authority shall take all lawful measures to revise the schedule of rates, tolls, fees, rentals and charges as may be necessary to produce Net Revenues, together with any amounts available in the Coverage Account, in the amounts specified in subsections (a) and (b) above in the next succeeding Fiscal Year.

(e) In the event that Net Revenues, together with any amounts available in the Coverage Account, for any Fiscal Year are less than the amounts specified in subsections (a) or (b) above, but the Authority has, prior to or during the next succeeding Fiscal Year, promptly taken all lawful measures to revise the schedule of rates, tolls, fees, rentals and charges as required by subsection (d) above, such deficiency in Net Revenues, together with any amounts available in the Coverage Account, shall not constitute an Event of Default under the provisions of Section 8.01(d) hereof. Nevertheless, if after taking the measures required by subsection (d) above to revise the schedule of rates, tolls, fees, rentals and charges, Net Revenues, together with any amounts available in the Coverage Account, in the next succeeding Fiscal Year (as evidenced by the audited financial statements of the Authority for such Fiscal Year) are less than the amounts specified in subsections (a) or (b) above, such deficiency in Net Revenues, together with any amounts available in the Coverage Account, shall constitute an Event of Default under the provisions of Section 8.01(d) hereof.

Section 5.05. No Inconsistent Contract Provisions. The Authority hereby covenants that no contract or contracts will be entered into or any action taken by the Authority which shall be inconsistent with the provisions of this Indenture. The Authority hereby further covenants that it will not take any action which, in the Authority's judgment at the time of such action, will substantially impair or materially adversely affect the Net Revenues, or will substantially impair or materially adversely affect in any manner the pledge of, lien on or security interest granted in the Net Revenues herein or the rights of the holders of the Bonds. The Authority shall be unconditionally and irrevocably obligated, so long as any of the Bonds are Outstanding and unpaid, to take all lawful action necessary or required to pay from the Net Revenues the principal of and interest on the Bonds and to make the other payments provided for herein.

Section 5.06. Subordinate Obligations. The Authority may, from time to time, incur indebtedness which is subordinate to the Bonds and which indebtedness is, in this Indenture, referred to as Subordinate Obligations. Such indebtedness shall be incurred at such times and upon such terms as the Authority shall determine, provided that:

(a) any Supplemental Indenture or other written instrument authorizing the issuance of any Subordinate Obligations shall specifically state that such lien on or security interest granted in the Revenues and the Net Revenues is junior and subordinate to the lien on and security interest in such Revenues and Net Revenues and other assets granted to secure the Bonds; and

(b) payment of principal of and interest on such Subordinate Obligations shall be permitted, provided that all deposits required to be made pursuant to Sections 4.03(b)(i) through (iii) hereof, if any, are then current in accordance with Section 4.03(b) hereof.

Section 5.07. Special Facilities and Special Facility Obligations.

(a) Anything in this Indenture to the contrary notwithstanding, the Authority may issue Special Facility Obligations for the purpose of acquiring, constructing, renovating, remodeling or rehabilitating a Special Facility for use, lease or sublease thereof pursuant to the provisions of this Section or for refunding other Special Facility Obligations. Such Special Facility Obligations (i) shall be payable solely from amounts payable by the user, lessee or sublessee under a Special Facility Agreement entered into with respect to the Special Facility to be financed from such Special Facility Obligations; (ii) shall not be a charge or claim against or payable from or secured by the Net Revenues or any other monies held hereunder; (iii) will not result in a reduction of Net Revenues; and (iv) shall mature within the term of the Special Facility Agreement entered into with respect to such Special Facility.

(b) A Special Facility Agreement shall be entered into between the Authority and the user or occupier of such Special Facility pursuant to which the user, lessee or sublessee shall agree to pay or otherwise provide for payment of (i) installment amounts which will be sufficient to pay during such term as the same respectively becomes due the principal of and interest on all Special Facility Obligations to be issued pursuant to this section to pay the cost of construction or acquisition of the Special Facility; (ii) amounts necessary or required to provide or maintain all reserves required for such Special Facility Obligations and to pay all trustees', fiscal agents' and paying agents' fees and expenses in connection therewith; (iii) installment amounts equal to a properly allocable share of the administrative costs of the Authority arising out of such Special Facility Agreement and the issuance and servicing of such Special Facility Obligations or, if the land on which the Special Facility is to be constructed constitutes a part of the Airport System, a ground rental for the ground upon which such Special Facility is or is to be located payable in periodic installments in amounts not less than shall be required pursuant to the Authority's policy for rental of ground space in the Airport System as fixed from time to time by the Authority; provided that any amount payable pursuant to this clause (iii) shall be free and clear of all charges under said Special Facility Agreement, shall be in addition to the amounts required by clauses (i), (ii) and (iv), and shall constitute

Revenues and be paid into the Revenue Fund; and (iv) all costs connected with the ownership, operation, maintenance, repair, renewals and rehabilitation of the Special Facility (including, without limitation, insurance, utilities, taxes or payments in lieu of taxes and assessments).

(c) Special Facility Obligations issued pursuant to the provisions of this Section may also be refunded by the issuance of Bonds if (i) all such Special Facility Obligations then Outstanding and unpaid pertaining to the particular Special Facility are refunded at one time from such issuance of Bonds or are then otherwise retired; and (ii) the conditions contained in Section 2.09 of this Indenture are complied with upon such refunding, and, for the purposes of any such refunding, such refunding shall be considered as though the Authority were acquiring such Special Facility by the issuance of Bonds pursuant to Section 2.11(a) hereof.

(d) If a Special Facility is located on land included in the Airport System, upon the retirement of the indebtedness evidenced by the Special Facility Obligations issued therefor all rentals and other income thereafter received by the Authority from the Special Facility for which Special Facility Obligations were issued shall, to the extent permitted by law, constitute Revenues and be paid into the Revenue Fund, to be used and applied as are other monies deposited therein, and if such rentals and other income shall then constitute Revenues, such Special Facility shall, unless contrary to law, then constitute part of the Airport System for all purposes of this Indenture.

Section 5.08. Maintenance of Powers. The Authority hereby covenants that it will at all times use its best efforts to maintain the powers, functions, duties and obligations now reposed in it pursuant to the Act, the Constitution of the Commonwealth and all other laws and that it will not at any time voluntarily do, suffer or permit any act or thing the effect of which would be to delay either the payment of the indebtedness evidenced by any of the Bonds or the performance or observance of any of the covenants herein contained.

Section 5.09. Operation and Maintenance of Airport System. Subject to the transfer of any Airport Facilities pursuant to Section 5.12 hereof, the Authority hereby covenants that the Airport System shall at all times be operated and maintained in good working order and condition and that all lawful orders of any governmental agency or authority having jurisdiction in the premises shall be complied with (provided the Authority shall not be required to comply with any such orders so long as the validity or application thereof shall be contested in good faith), and that all licenses and permits necessary to construct or operate any part of the Airport System shall be obtained and maintained and that all necessary repairs, improvements and replacements of the Airport System shall be made, subject to sound business judgment. Subject to the transfer of any Airport Facilities pursuant to Section 5.12 hereof, the Authority shall, from time to time, duly pay and discharge, or cause to be paid and discharged, except to the extent the imposition or payment thereof is being contested in good faith by the Authority, all taxes (if any), assessments or other governmental charges lawfully imposed upon the Airport System or upon any part thereof, or upon the Revenues or Net Revenues, when the same shall become due, as well as any lawful claim for labor, materials or supplies or other charges which, if unpaid, might by law become a lien or charge upon the Revenues or Net Revenues or the Airport System or any part thereof constituting part of the Airport System.

Section 5.10. Insurance; Application of Insurance Proceeds.

(a) The Authority shall:

(i) procure and maintain or cause to be procured and maintained commercial insurance or provide Qualified Self Insurance with respect to the facilities constituting the Airport System and public liability insurance in the form of commercial insurance or Qualified Self Insurance and, in each case, in such amounts and against such risks as are, in the judgment of the Authority, prudent and reasonable taking into account, but not being controlled by, the amounts and types of insurance or self-insured programs provided by similar airports; and

(ii) place on file with the Trustee, annually within 120 days after the close of each Fiscal Year a certificate of an Authorized Authority Representative containing a summary of all insurance policies and self-insured programs then in effect with respect to the Airport System and the operations of the Authority related to the Airport System. The Trustee may conclusively rely upon such certificate and shall not be responsible for the sufficiency or adequacy of any insurance required herein or obtained by the Authority.

(b) "***Qualified Self Insurance***" shall mean insurance maintained through a program of self insurance or insurance maintained with a fund, company or association in which the Authority may have a material interest and of which the Authority may have control, either singly or with others. Each plan of Qualified Self Insurance shall be established in accordance with law, shall provide that reserves be established or insurance acquired in amounts adequate to provide coverage which the Authority determines to be reasonable to protect against risks assumed under the Qualified Self Insurance plan, including any potential retained liability in the event of the termination of such plan of Qualified Self Insurance, and such self-insurance program shall be reviewed at least once every 12 months by a Consultant who shall deliver to the Authority a report on the adequacy of the reserves established thereunder. If the Consultant determines that such reserves are inadequate, they shall make a recommendation as to the amount of reserves that should be established and maintained, and the Authority shall comply with such recommendation unless it can establish to the satisfaction of and receive a certification from a Consultant that a lower amount is reasonable to provide adequate protection to the Authority.

(c) If, as a result of any event, any part of the Airport System is destroyed or Account and shall credit the Net Proceeds received as a result of such event of damage or destruction to such Account and such Net Proceeds shall, within a reasonable period of time taking into account any terms under which insurance proceeds are paid and any insurance restrictions upon the use or timing of the use of insurance proceeds, be used to: (i) repair or replace the Airport System, or portion thereof, which were damaged or destroyed, (ii) provide additional revenue-producing Airport Facilities, (iii) redeem

Bonds, or (iv) create an escrow fund pledged to pay specified Bonds and thereby cause such Bonds to be deemed to be paid as provided in Article VII hereof.

Section 5.11. Accounts. The Authority hereby covenants that it will keep and provide accurate books and records of account showing all Revenues received and all expenditures of the Authority relating to the Airport System and that it will keep or cause to be kept accurate books and records of account showing all moneys, Revenues, accounts and funds (including the Revenue Fund and all Funds, Accounts and Subaccounts provided for in this Indenture) which are or shall be in the control or custody of the Authority; and that all such books and records pertaining to the Airport System shall be open upon reasonable notice during business hours to the Trustee and to the Owners of not less than 10% of the Principal Amount of Bonds then Outstanding, or their representatives duly authorized in writing.

Section 5.12. Transfer of Airport Facility or Airport Facilities. The Authority shall not, except as permitted below, transfer, sell or otherwise dispose of an Airport Facility or Airport Facilities. For purposes of this Section 5.12, any transfer of an asset over which the Authority retains substantial control in accordance with the terms of such transfer, shall not, for so long as the Authority has such control, be deemed a disposition of an Airport Facility or Airport Facilities. Long term ground or facility leases shall not be deemed to constitute a transfer. The Authority may transfer, sell or otherwise dispose of Airport Facilities only if such transfer, sale or disposition complies with one or more of the following provisions:

(a) the property being disposed of is inadequate, obsolete or worn out; or

(b) the property proposed to be disposed of and all other Airport Facilities disposed of during the 12-month period ending on the day of such transfer (but excluding property disposed of under (a) above), will not, in the aggregate, constitute a Significant Portion, the proceeds are first paid to the FAA to the extent required under applicable regulations and the balance deposited into the Airport System Capital Fund to be used as described below and the Authority believes that such disposal will not prevent it from fulfilling its obligations under this Indenture; or

(c) if the property being transferred, sold or disposed of does not constitute all of the Airport Facilities that comprise the Pittsburgh International Airport, the Authority receives fair market value for the property, the proceeds are first paid to the FAA to the extent required under applicable regulations and the balance are deposited in the Airport System Capital Fund to be used as described below, and prior to the disposition of such property, there is delivered to the Trustee a certificate of a Consultant to the effect that notwithstanding such disposition, but taking into account the use of such proceeds in accordance with the expectations of the Authority as evidenced by a certificate of an Authorized Authority Representative, the Consultant estimates that the Authority will be in compliance with Section 5.04(a) and (b) hereof during each of the first five (5) Fiscal Years immediately following such disposition; or

(d) if the property being transferred, sold or disposed of constitutes all of the Airport Facilities that comprise the Pittsburgh International Airport, the proceeds received by the Authority from such transfer, sale or disposition shall be sufficient (along with any other available moneys of the Authority) to cause all Bonds and Subordinate Obligations then Outstanding to be deemed to be paid as provided in Article VII hereof and the proceeds (along with any other available moneys of the Authority) shall be deposited to an escrow fund pledged to the payment of all Bonds then Outstanding.

Proceeds of the transfer, sale or disposition of assets under clauses (b) or (c) above shall be deposited into the Airport System Capital Fund. Airport Facilities which were financed with the proceeds of obligations the interest on which is then excluded from gross income for federal income tax purposes shall not be disposed of, except under the terms of clause (a) above, unless the Authority has first received a written opinion of Bond Counsel to the effect that such disposition will not cause the interest on such obligations to become includable in gross income for federal income tax purposes.

No such disposition shall be made which would cause the Authority to be in default of any other covenant contained in this Indenture or any applicable FAA regulation or grant assurance.

Section 5.13. Eminent Domain. If a Significant Portion of any Airport Facility or Airport Facilities are taken by eminent domain proceedings or conveyance in lieu thereof, the Authority shall create within the Revenue Fund a special Account and credit the Net Proceeds received as a result of such taking or conveyance to such Account and shall within a reasonable period of time, after the receipt of such amounts, use such proceeds, subject to any applicable provisions of the Code, to (a) replace the Airport Facility or Airport Facilities which were taken or conveyed, (b) provide an additional revenue-producing Airport Facility or Airport Facilities, (c) redeem Bonds, or (d) create an escrow fund pledged to pay specified Bonds and thereby cause such Bonds to be deemed to be paid as provided in Article VII hereof. The Authority shall notify each of the Rating Agencies that the Authority has requested ratings from and who are then maintaining a rating on any of the Bonds if a Significant Portion of any Airport Facilities is taken or threatened to be taken.

Section 5.14. Covenants of Authority Binding on Authority and Successors. All covenants, stipulations, obligations and agreements of the Authority contained in this Indenture shall be deemed to be covenants, stipulations, obligations and agreements of the Authority to the full extent authorized or permitted by law. If the powers or duties of the Authority shall hereafter be transferred by amendment of the Act or a new Act or any provision of the Constitution of the Commonwealth or any other law of the Commonwealth or in any other manner there shall be a successor to the Authority, and if such transfer shall relate to any matter or thing permitted or required to be done under this Indenture by the Authority, then the entity that shall succeed to such powers or duties of the Authority shall act and be obligated in the place and stead of the Authority as in this Indenture provided, and all such covenants, stipulations, obligations and agreements shall be binding upon the successor or successors thereof from time to time and upon any officer, board, body or commission to whom or to which any power or duty affecting such covenants, stipulations, obligations and agreement shall be transferred by or in accordance with law.

Except as otherwise provided in this Indenture, all rights, powers and privileges conferred and duties and liabilities imposed upon the Authority by the provisions of this Indenture shall be exercised or performed by the Authority or by such officers, board, body or commission as may be permitted by law to exercise such powers or to perform such duties.

Section 5.15. Instruments of Further Assurance. The Authority covenants that it shall do, execute, acknowledge and deliver, or cause to be done, executed, acknowledged and delivered, such Supplemental Indentures, and such further acts, instruments and transfers as the Trustee may reasonably request for the better assuring and confirming to the Trustee all and singular the rights and obligations of the Authority under and pursuant to this Indenture and the security intended to be conferred hereby to secure the Bonds.

Section 5.16. Indenture To Constitute a Contract. This Indenture, including all Supplemental Indentures, is executed by the Authority for the benefit of the Bondholders and constitutes a contract with the Trustee for the benefit of the Bondholders.

Section 5.17. Annual Reporting of Audited Financial Statements. Within 210 days after the close of each Fiscal Year, so long as any Bonds are Outstanding, the Authority shall prepare audited financial statements including a statement of the income and expenses for such Fiscal Year and a balance sheet prepared as of the close of such Fiscal Year for the Authority with respect to the Airport System all accompanied by a certificate or opinion in writing of an Independent certified public accountant of recognized standing, selected by the Authority, which opinion shall include a statement that said financial statements present fairly in all material respects the financial position of the Authority with respect to the Airport System and are prepared in accordance with Generally Accepted Accounting Principles.

Section 5.18. Tax Covenants. Except to the extent modified with respect to any Series of Bonds in the applicable Supplemental Indenture, the Authority covenants as follows:

(a) The Authority will make no use of the proceeds of any Series of Bonds, or permit any use of a Project, or take any action or permit any other action to be taken with respect to a Project, that would affect adversely the exclusion from gross income of interest on such Series of Bonds for federal income tax purposes and, if applicable, the non-tax preference status of such interest for federal alternative minimum income tax purposes.

(b) The Authority shall comply with covenants with respect to the use of proceeds of Bonds and the use of the Project as provided in the applicable Supplemental Indenture.

Section 5.19. Covenant Against Competing Facilities. The Authority covenants that it will not construct, operate or enter into any agreement permitting or facilitating the construction or operation of, any facilities or structures that will compete with the operations of the Airport System in a manner that would materially and adversely affect its ability to comply with the covenant set forth in Section 5.04 hereof unless the amounts derived from operating such facilities are included as Revenues under this Indenture.

ARTICLE VI

INVESTMENT OF MONEYS; PERMITTED INVESTMENTS

Section 6.01. Investment of Moneys in Funds, Accounts and Subaccounts. Moneys held by the Authority and/or the Trustee in the Funds, Accounts and Subaccounts created herein and under any Supplemental Indenture shall be invested and reinvested as directed by the Authority, in Permitted Investments subject to the restrictions set forth in this Indenture and any Supplemental Indenture and subject to the investment restrictions imposed upon the Authority by the laws of the Commonwealth and the Authority's investment policy. The Authority shall direct such investments by written certificate (which certificate shall include a certification that such directions comply with the Authority's investment policy and upon which the Trustee may conclusively rely) of an Authorized Authority Representative. In the absence of any such instructions, the Trustee shall hold such moneys uninvested.

Investments in any and all Funds, Accounts and Subaccounts established and held by the Trustee pursuant to this Indenture or any Supplemental Indenture may be commingled for purposes of making, holding and disposing of investments, notwithstanding provisions herein for transfer to or holding in a particular Fund, Account or Subaccount amounts received or held by the Trustee hereunder or under a Supplemental Indenture, provided that the Trustee shall at all times account for such investments strictly in accordance with the particular Fund, Account or Subaccount to which they are credited and otherwise as provided in this Indenture or a Supplemental Indenture. The Trustee may act as principal or agent in the making or disposing of any investment. To the extent Permitted Investments are registerable, such investments shall be registered in the name of the Trustee. The Trustee may sell or present for redemption any securities so purchased whenever it shall be necessary to provide moneys to meet any required payment, transfer, withdrawal or disbursement from the Fund, Account or Subaccount to which such securities are credited, and the Trustee shall not be liable or responsible for any loss resulting from such investment. The Trustee shall have no investment discretion.

The Trustee is hereby authorized, in making or disposing of any investment permitted by this Section, to deal with itself (in its individual capacity) or with any one or more of its affiliates, whether it or such affiliate is acting as an agent of the Trustee or for any third person or dealing as principal for its own account.

The Authority acknowledges that to the extent regulations of an applicable regulatory entity grant the Authority the right to receive brokerage confirmations of security transactions as they occur, the Authority specifically waives receipt of such confirmations to the extent permitted by law. The Authority further understands that trade confirmations for securities transactions effected by the Trustee will be available upon request and at no additional cost and other trade confirmations may be obtained from the applicable broker. The Trustee shall furnish to the Authority periodic cash transaction statements which include detail for all investment transactions made by the Trustee hereunder or under any Supplemental Indenture. Upon the Authority's election, such statements shall be delivered via the Trustee's online service and upon electing such service, paper statements will be provided only upon request.

The Trustee shall not be liable for any loss resulting from following the written directions of the Authority or as a result of liquidating investments to provide funds for any required payment, transfer, withdrawal or disbursement from any Fund, Account or Subaccount in which such Permitted Investment is held.

In the absence of direction from the Authority, the Trustee may buy or sell any Permitted Investment through its own (or any of its affiliates) investment department in compliance with federal tax law pertaining to arbitrage.

ARTICLE VII

DEFEASANCE

Bonds or portions thereof (such portions to be in integral multiples of the authorized denominations set forth in the applicable Supplemental Indenture) which have been paid in full or which are deemed to have been paid in full shall no longer be secured by or entitled to the benefits of this Indenture except for the purposes of payment from moneys and/or Government Obligations held by the Trustee or a Paying Agent for such purpose. When all Bonds which have been issued under this Indenture have been paid in full or are deemed to have been paid in full, and all other sums payable hereunder by the Authority, including all necessary and proper fees, compensation and expenses of the Trustee, the Registrar and the Paying Agent, have been paid or are duly provided for, then the right, title and interest of the Trustee in and to the pledge of Net Revenues and the other assets pledged to secure the Bonds hereunder shall thereupon cease, terminate and become void, and thereupon the Trustee shall cancel, discharge and release this Indenture, shall execute, acknowledge and deliver to the Authority such instruments as shall be required to evidence such cancellation, discharge and release and shall assign and deliver to the Authority any property and revenues at the time subject to this Indenture which may then be in the Trustee's possession, except funds or securities in which such funds are invested and are held by the Trustee or the Paying Agent for the payment of the principal of, premium, if any, and interest on the Bonds.

A Bond shall be deemed to be paid within the meaning of this Article VII and for all purposes of this Indenture when payment of the principal, interest and premium, if any, either (a) shall have been made or caused to be made in accordance with the terms of the Bonds and this Indenture or (b) shall have been provided for, as confirmed to the Trustee in a report prepared by a nationally recognized accounting firm, by irrevocably depositing with the Trustee in trust and setting aside exclusively for such payment, (i) moneys sufficient to make such payment and/or (ii) noncallable Government Obligations maturing as to principal and interest in such amounts and at such times as will insure the availability of sufficient moneys to make such payment, and (c) the Trustee is in receipt of an opinion Bond Counsel stating that all conditions precedent to the satisfaction and discharge of the lien hereof have been satisfied with respect to the Bonds. At such times as Bonds shall be deemed to be paid hereunder, such Bonds shall no longer be secured by or entitled to the benefits of this Indenture, except for the purposes of payment from such moneys and/or Government Obligations.

Notwithstanding the foregoing paragraph, no deposit under clause (b) of the immediately preceding paragraph shall be deemed a payment of such Bonds until (x) proper notice of redemption of such Bonds shall have been given in accordance with the terms of the Supplemental Indenture under which such Bonds were issued or, in the event, under the terms of such Supplemental Indenture, the date for giving such notice of redemption has not yet arrived, until the Authority shall have given the Trustee irrevocable instructions to give such notice of redemption when appropriate and to notify all holders of the affected Bonds that the deposit required by (b) above has been made with the Trustee and that such Bonds are deemed to have been paid in accordance with this Article VII and stating the maturity or redemption date upon which moneys are to be available for the payment of the principal, interest and premium, if any, on such Bonds; or (y) the maturity of such Bonds.

In connection with the redemption or defeasance, or partial redemption or defeasance of Bonds, the Authority may permit, or cause to be assigned to Bonds of a single maturity, multiple CUSIP numbers.

ARTICLE VIII

DEFAULTS AND REMEDIES

Section 8.01. Events of Default. Each of the following events shall constitute and is referred to in this Indenture as an "Event of Default":

(a) a failure to pay the principal of or premium, if any, on any of the Bonds when the same shall become due and payable at maturity or upon redemption;

(b) a failure to pay any installment of interest on any of the Bonds when such interest shall become due and payable;

(c) a failure to pay the purchase price of any Bond when such purchase price shall be due and payable upon an optional or mandatory tender date as provided in a Supplemental Indenture;

(d) a failure by the Authority to observe and perform any covenant, condition, agreement or provision (other than as specified in clauses (a), (b) and (c) of this Section 8.01) that are to be observed or performed by the Authority and which are contained in this Indenture or a Supplemental Indenture, which failure, except for a violation under Section 5.04 hereof which shall be controlled by the provisions set forth therein, shall continue for a period of sixty (60) days after written notice, specifying such failure and requesting that it be remedied, shall have been given to the Authority by the Trustee, which notice may be given at the discretion of the Trustee and shall be given at the written request of holders of 25% or more of the Principal Amount of the Bonds then Outstanding, unless the Trustee, or the Trustee and the holders of Bonds in a Principal Amount not less than the Principal Amount of Bonds the holders of which requested such notice, shall agree in writing to an extension of such period prior to its expiration; provided, however, that the Trustee or the Trustee and the holders of such principal amount of Bonds shall be deemed to have agreed to an extension of such period if corrective action is initiated by the Authority within such period and is being diligently pursued until such failure is corrected;

(e) bankruptcy, reorganization, arrangement, insolvency or liquidation proceedings, including without limitation proceedings under Chapter 9 of the United States Bankruptcy Code, or other proceedings for relief under any federal or state bankruptcy law or similar law for the relief of debtors are instituted by or against the Authority and, if instituted against the Authority, said proceedings are consented to or are not dismissed within 60 days after such institution; or

(f) the occurrence of any other Event of Default as is provided in a Supplemental Indenture.

Section 8.02. Remedies.

(a) Upon the occurrence and continuance of any Event of Default, the Trustee in its discretion may, and upon the written direction of the holders of 25% or more of the Principal Amount of the Bonds then Outstanding and receipt of indemnity to its satisfaction, shall, in its own name and as the Trustee of an express trust:

(i) by mandamus, or other suit, action or proceeding at law or in equity, enforce all rights of the Bondholders, and require the Authority to carry out any agreements with or for the benefit of the Bondholders and to perform its or their duties under the Act, the Constitution of the Commonwealth or any other law to which it is subject and this Indenture;

(ii) bring suit upon the Bonds;

(iii) commence an action or suit in equity to require the Authority to account as if it were the trustee of an express trust for the Bondholders;

(iv) by action or suit in equity enjoin any acts or things which may be unlawful or in violation of the rights of the Bondholders; or

(v) take such other action as are provided for in the Supplemental Indenture.

(b) The Trustee shall be under no obligation to take any action with respect to any Event of Default unless the Trustee has actual knowledge of the occurrence of such Event of Default.

(c) In no event, upon the occurrence and continuation of an Event of Default, shall the Trustee, Bondholders, a Credit Provider, a Liquidity Provider or any other party have the right to accelerate the payment of principal of or interest on the Bonds Outstanding.

Section 8.03. Restoration to Former Position. In the event that any proceeding taken by the Trustee to enforce any right under this Indenture shall have been discontinued or abandoned for any reason, or shall have been determined adversely to the Trustee, then the Authority, the Trustee, and the Bondholders shall be restored to their former positions and rights hereunder, respectively, and all rights, remedies and powers of the Trustee shall continue as though no such proceeding had been taken.

Section 8.04. Bondholders' Right To Direct Proceedings. Anything in this Indenture to the contrary notwithstanding, holders of 51% or more in aggregate Principal Amount of the Bonds then Outstanding shall have the right, at any time, by an instrument in writing executed and delivered to the Trustee, to direct the time, method and place of conducting all remedial proceedings available to the Trustee under this Indenture to be taken in connection with the enforcement of the terms of this Indenture or exercising any trust or power conferred on the Trustee by this Indenture; provided that such direction shall not be otherwise than in accordance with the provisions of the law and this Indenture and that there shall have been provided to the Trustee security and indemnity satisfactory to the Trustee against the costs, expenses and liabilities to be incurred as a result thereof by the Trustee.

Section 8.05. Limitation on Right To Institute Proceedings. No Bondholder shall have any right to institute any suit, action or proceeding in equity or at law for the execution of any trust or power hereunder, or any other remedy hereunder or on such Bonds, unless such Bondholder or Bondholders previously shall have given to the Trustee written notice of an Event of Default as hereinabove provided and unless also holders of 25% or more of the Principal Amount of the Bonds then Outstanding shall have made written request of the Trustee to do so, after the right to institute such suit, action or proceeding under Section 8.02 hereof shall have accrued, and shall have afforded the Trustee a reasonable opportunity to proceed to institute the same in either its or their name, and unless there also shall have been offered to the Trustee security and indemnity satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall not have complied with such request within a reasonable time; and such notification, request and offer of indemnity are hereby declared in every such case, at the option of the Trustee, to be conditions precedent to the institution of such suit, action or proceeding; it being understood and intended that no one or more of the Bondholders shall have any right in any manner whatever by their action to affect, disturb or prejudice the security of this Indenture, or to enforce any right hereunder or under the Bonds, except in the manner herein provided, and that all suits, actions and proceedings at law or in equity shall be instituted, had and maintained in the manner herein provided and for the equal benefit of all Bondholders.

Section 8.06. No Impairment of Right To Enforce Payment. Notwithstanding any other provision in this Indenture, the right of any Bondholder to receive payment of the principal of and interest on such Bond or the purchase price thereof, on or after the respective due dates expressed therein and to the extent of the pledge of Net Revenues and other security provided for the Bonds, or to institute suit for the enforcement of any such payment on or after such respective date, shall not be impaired or affected without the consent of such Bondholder.

Section 8.07. Proceedings by Trustee Without Possession of Bonds. All rights of action under this Indenture or under any of the Bonds secured hereby which are enforceable by the Trustee may be enforced by it without the possession of any of the Bonds, or the production thereof at the trial or other proceedings relative thereto, and any such suit, action or proceeding instituted by the Trustee shall be brought in its name for the equal and ratable benefit of the Bondholders, subject to the provisions of this Indenture.

Section 8.08. No Remedy Exclusive. No remedy herein conferred upon or reserved to the Trustee or to Bondholders is intended to be exclusive 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 hereunder, or now or hereafter existing at law or in equity or by statute; provided, however, that any conditions set forth herein to the taking of any remedy to enforce the provisions of this Indenture or the Bonds shall also be conditions to seeking any remedies under any of the foregoing pursuant to this Section 8.08.

Section 8.09. No Waiver of Remedies. No delay or omission of the Trustee or of any Bondholder 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 this Article VIII to the Trustee and to the Bondholders, respectively, may be exercised from time to time and as often as may be deemed expedient.

Section 8.10. Application of Moneys. If an Event of Default shall occur and be continuing, all amounts then held or any moneys received by the Trustee, by any receiver or by any Bondholder pursuant to any right given or action taken under the provisions of this Article VIII (which shall not include moneys provided through a Liquidity Facility or a Credit Facility, which moneys shall be restricted to the specific use for which such moneys were provided), after payment of the costs and expenses of the proceedings resulting in the collection of such moneys by the Trustee or by any receiver and of the expenses, liabilities and advances incurred or made by the Trustee in connection with its performance of its powers and duties under this Indenture and any Supplemental Indenture (including attorneys' fees and disbursements), shall be applied as follows: (a) first, to the payment to the persons entitled thereto of all installments of interest then due on the Bonds, with interest on overdue installments, if lawful, at the rate per annum as provided in any Supplemental Indenture, as the case may be, in the order of maturity of the installments of such interest and, if the amount available shall not be sufficient to pay in full any particular installment of interest, then to the payment ratably, according to the amounts due on such installment, and (b) second, to the payment to the persons entitled thereto of the unpaid principal amount of any of the Bonds which shall have become due with interest on such Bonds at such rate as provided in a Supplemental Indenture from the respective dates upon which they became due and, if the amount available shall not be sufficient to pay in full Bonds on any particular date determined to be the payment date, together with such interest, then to the payment ratably, according to the amount of principal and interest due on such date, in each case to the persons entitled thereto, without any discrimination or privilege.

Whenever moneys are to be applied pursuant to the provisions of this Section 8.10, such moneys shall be applied at such times, and from time to time, as the Trustee shall determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. Whenever the Trustee shall apply such funds, it shall fix the date (which shall be an interest Payment Date unless it shall deem another date more suitable) upon which such application is to be made and upon such date interest on the amounts of principal and interest paid on such date shall cease to accrue. The Trustee shall give notice of the deposit with it of any such moneys and of the fixing of any such date by Mail (or such other approved delivery method) to all Bondholders and shall not be required to make payment to any Bondholder until such Bonds shall be presented to the Trustee for appropriate endorsement or for cancellation if fully paid.

Section 8.11. Severability of Remedies. It is the purpose and intention of this Article VIII to provide rights and remedies to the Trustee and the Bondholders, which may be lawfully granted under the provisions of the Act and other applicable law, but should any right or remedy herein granted be held to be unlawful, the Trustee and the Bondholders shall be entitled, as above set forth, to every other right and remedy provided in this Indenture or by applicable law.

Section 8.12. Additional Events of Default and Remedies. So long as any particular Series of Bonds is Outstanding, the remedies as set forth in this Article VIII may be supplemented with additional remedies as set forth in a Supplemental Indenture under which such Series of Bonds is issued.

ARTICLE IX

TRUSTEE, PAYING AGENT AND CO-PAYING AGENTS; REGISTRAR

Section 9.01. Acceptance of Trusts. The Trustee hereby accepts and agrees to execute the trusts specifically imposed upon it by this Indenture, but only upon the additional terms set forth in this Article IX, to all of which the Authority agrees and the respective Bondholders agree by their acceptance of delivery of any of the Bonds.

Section 9.02. Duties of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise its rights and powers and use the same degree of care and skill in their exercise as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) The Trustee shall perform the duties set forth in this Indenture and no implied duties or obligations shall be read into this Indenture against the Trustee.

(c) Except during the continuance of an Event of Default, in the absence of any negligence on its part or any knowledge to the contrary, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture. However, the Trustee shall examine the certificates and opinions to determine whether they conform to the requirements of this Indenture.

(d) The Trustee may not be relieved from liability for its own negligent action, its own negligent failure to act or its own willful misconduct, except that:

(i) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer unless the Trustee was negligent in ascertaining the pertinent facts; and

(ii) the Trustee shall not be liable with respect to any action it takes or omits to take in good faith in accordance with a direction received by it from Bondholders or the Authority in the manner provided in this Indenture.

(e) The Trustee shall not, by any provision of this Indenture, be required to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it. The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the holders of the Bonds or any Credit Provider or Liquidity Provider, unless such holders, Credit Providers and Liquidity Providers, as applicable, shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction.

(f) Every provision of this Indenture that in any way relates to the Trustee is subject to the provisions of this Section 9.02.

Section 9.03. Rights of Trustee. Subject to the Section 9.02 hereof, the Trustee shall be protected and shall incur no liability in acting or proceeding in good faith upon any resolution, notice, telegram, facsimile, request, consent, waiver, certificate, direction, statement, affidavit, voucher, bond, requisition or other paper or document which it shall in good faith believe to be genuine and to have been passed or signed by an Authorized Authority Representative or to have been prepared and furnished pursuant to any of the provisions of this Indenture, and the Trustee shall be under no duty to make investigation or inquiry as to any statements contained or matters referred to in any such instrument, but may accept and rely upon the same as conclusive evidence of the truth and accuracy of such statements. The Trustee may rely upon the calculations provided by the entity preparing the calculation of Aggregate Annual Debt Service in connection with its responsibility to ensure there exists in the Common Debt Service Reserve Account or any Series Debt Service Reserve Account, the required amounts.

The Trustee may consult with counsel with regard to legal questions, and the opinion of such counsel shall be full and complete authorization and protection in respect of any action taken or suffered by the Trustee hereunder in good faith in accordance therewith.

Whenever in the administration of the trusts or duties imposed upon it by this Indenture the Trustee shall deem it necessary that a matter be proved or established prior to taking or not taking any action hereunder, such matter may be deemed to be conclusively proved and established by a certificate of the Authority, and such certificate shall be full warrant to the Trustee for any action taken or not taken by it in good faith under the provisions of this Indenture in reliance on such certificate.

The Trustee makes no representation as to the sufficiency or validity of this Indenture or of any Bonds, or in respect of the security afforded by this Indenture.

The Trustee shall not be liable for any action taken or omitted by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it under this Indenture, except for its own negligence or willful misconduct. The permissive right of the Trustee to do things enumerated in this Indenture shall not be construed as a duty.

In the performance of its duties hereunder, the Trustee may employ attorneys, agents and receivers and shall not be liable for any actions of such attorneys, agents and receivers to the extent selected by it with reasonable care.

The Trustee shall have no responsibility with respect to any information, statement or recital whatsoever in any official statement, offering memorandum or other disclosure material prepared or distributed with respect to the Bonds.

The Trustee shall not be considered in breach of or in default in its obligations hereunder in the event of enforced delay or unavoidable delay in the performance of such obligations due to unforeseeable causes beyond its control and without its fault or negligence, including, but not limited to, Force Majeure Events.

The Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request, order or direction of any Bondholder pursuant to the provisions of this Indenture unless such Bondholder shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which may be incurred therein or thereby.

No provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of its rights or powers.

The Trustee shall not be bound to ascertain or inquire as to the validity or genuineness of any collateral given to or held by it. The Trustee shall not be responsible for the recording or filing of any document relating to this Indenture or of financing statements (or continuation statements in connection therewith) or of any supplemental instruments or documents of further assurance as may be required by law in order to perfect the security interests in any collateral given to or held by it.

The Trustee shall not be concerned with or accountable to anyone for the subsequent use or application of any moneys which shall be released or withdrawn in accordance with the provisions hereof.

The Trustee shall have the right to accept and act upon directions given pursuant to this Indenture and delivered using Electronic Means; provided, however, that the Authority shall provide to the Trustee an incumbency certificate listing officers with the authority to provide such directions and containing specimen signatures of such Authorized Authority Representative, which incumbency certificate shall be amended whenever a person is to be added or deleted from the listing. If the Authority elects to give the Trustee directions using Electronic Means and the Trustee in its discretion elects to act upon such directions, the Trustee's understanding of such directions shall be deemed controlling. The Authority understands and agrees that the Trustee cannot determine the identity of the actual sender of such directions and that the Trustee shall conclusively presume that directions that purport to have been sent by an authorized officer listed on the incumbency certificate provided to the Trustee have been sent by such an Authorized Authority Representative. The Authority shall be responsible for ensuring that only authorized officers transmit such directions to the Trustee and that all Authorized Authority Representatives treat applicable user and authorization codes, passwords and/or authentication keys with extreme care. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such directions notwithstanding such directions conflict or are inconsistent with a subsequent written direction. The Authority each agrees: (i) to assume all risks arising out of the use of Electronic Means to submit directions to the Trustee, including without limitation the risk of the Trustee acting on unauthorized directions, and the risk of interception and misuse by third parties; (ii) that it is fully informed of the protections and risks associated with the various Means of transmitting directions to the Trustee and that there may be more secure Means of transmitting directions than the method(s) selected by the Authority (iii) that the security procedures (if any) to be followed in connection with its transmission of directions provide to it a commercially reasonable degree of protection in light of its particular needs and circumstances and (iv) to notify the Trustee immediately upon learning of any compromise or unauthorized use of the security procedures.

"Electronic Means" shall mean the following communications methods: e-mail, facsimile transmission, secure electronic transmission containing applicable authorization codes, passwords and/or authentication keys, or another method or system specified by the Trustee as available for use in connection with its services hereunder.

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Section 9.04. Individual Rights of Trustee. The Trustee in its individual or any other capacity may become the owner or pledgee of Bonds and may otherwise deal with the Authority with the same rights it would have if it were not Trustee. Any Paying Agent or other agent may do the same with like rights.

Section 9.05. Trustee's Disclaimer. The Trustee shall not be accountable for the Authority's use of the proceeds from the Bonds paid to the Authority and it shall not be responsible for any statement in the Bonds other than its certificate of authentication.

Section 9.06. Notice of Defaults. If (a) an Event of Default has occurred or (b) an event has occurred which with the giving of notice and/or the lapse of time would be an Event of Default and, with respect to such events for which notice to the Authority is required before such events will become Events of Default, such notice has been given, then the Trustee shall promptly, after obtaining actual notice of such Event of Default or event described in (b) of the first sentence of this Section 9.06, give notice thereof to each Bondholder. Except in the case of a default in payment or purchase of any Bonds, the Trustee may withhold the notice if and so long as a committee of its Responsible Officers in good faith determines that withholding the notice is in the interests of the Bondholders.

Section 9.07. Compensation of Trustee. For acting under this Indenture, the Trustee shall be entitled to payment of fees for its services and reimbursement of advances, counsel fees and other expenses reasonably and necessarily made or incurred by the Trustee in connection with its services under this Indenture, in accordance with a separate fee schedule, setting forth such terms and conditions, which has been approved by the Authority. To the extent permitted by law, the Authority agrees to indemnify and hold the Trustee and its officers, agents and directors harmless against any liabilities, costs, claims or expense, including fees, costs and expenses of counsel not arising from the Trustee's own negligence, misconduct or breach of duty, which the Trustee may incur in the exercise and performance of its rights and obligations hereunder including the enforcement of any remedies and the defense of any suit. Such obligation shall survive the discharge of this Indenture or the resignation or removal of the Trustee.

Section 9.08. Eligibility of Trustee. This Indenture shall always have a Trustee that is a trust company, banking association or a bank having the powers of a trust company and is organized and doing business under the laws of the United States or any state or the District of Columbia, is authorized to conduct trust business under the laws of the Commonwealth, is subject to supervision or examination by United States, Commonwealth or District of Columbia authority and has (together with its corporate parent) a combined capital and surplus of at least $100,000,000 as set forth in its most recent published annual report of condition.

Section 9.09. Replacement of Trustee. The Trustee may resign by notifying the Authority in writing prior to the proposed effective date of the resignation. The holders of 51% or more of the aggregate Principal Amount of the Bonds may remove the Trustee by notifying the removed Trustee and may appoint a successor Trustee with the Authority's consent. The Authority may remove the Trustee, by notice in writing delivered to the Trustee at least sixty (60) days prior to the proposed removal date; provided, however, that the Authority shall have no right to remove the Trustee during any time when an Event of Default has occurred and is continuing or when an event has occurred and is continuing or condition exists which with the giving of notice or the passage of time or both would be an Event of Default.

No resignation or removal of the Trustee under this Section 9.09 shall be effective until a new Trustee has taken office and delivered a written acceptance of its appointment to the retiring Trustee and to the Authority. Immediately thereafter, the retiring Trustee shall transfer all property held by it as Trustee to the successor Trustee, the resignation or removal of the retiring Trustee shall then (but only then) become effective and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture.

If the Trustee resigns or is removed or for any reason is unable or unwilling to perform its duties under this Indenture, the Authority shall promptly appoint a successor Trustee.

If a Trustee is not performing its duties hereunder and a successor Trustee does not take office within sixty (60) days after the retiring Trustee delivers notice of resignation or the Authority delivers notice of removal, the retiring Trustee, the Authority or the holders of 51% or more of the aggregate Principal Amount of the Bonds may petition any court of competent jurisdiction for the appointment of a successor Trustee.

Section 9.10. Successor Trustee or Agent by Merger. If the Trustee, any Paying Agent or Registrar consolidates with, merges or converts into, or sells to or transfers all or substantially all its assets (or, in the case of a bank, national banking association or trust company, its corporate trust assets) to, another corporation and meets the qualifications set forth in this Indenture, the resulting, surviving or transferee corporation without any further act shall be the successor Trustee, Paying Agent or Registrar.

Section 9.11. Paying Agent. The Authority may upon notice to the Trustee at any time or from time to time appoint a Paying Agent or Paying Agents for the Bonds or for any Series of Bonds, and each Paying Agent, if other than the Trustee, shall designate to the Authority and the Trustee its principal office and signify its acceptance of the duties and obligations imposed upon it hereunder or under a Supplemental Indenture by a written instrument of acceptance delivered to the Authority and the Trustee under which each such Paying Agent will agree, particularly:

(a) to hold all sums held by it for the payment of the principal of, premium or interest on Bonds in trust for the benefit of the Bondholders until such sums shall be paid to such Bondholders or otherwise disposed of as herein provided;

(b) to keep such books and records as shall be consistent with prudent industry practice, to make such books and records available for inspection by the Authority and the Trustee on each Business Day during reasonable business hours; and

(c) upon the request of the Trustee, to forthwith deliver to the Trustee all sums so held in trust by such Paying Agent.

Section 9.12. Registrar. The Authority shall appoint the Registrar for the Bonds or a Registrar or Registrars for any Series of Bonds and may from time to time remove a Registrar and name a replacement. Each Registrar, if other than the Trustee, shall designate to the Trustee, the Paying Agent, and the Authority its principal office and signify its acceptance of the duties imposed upon it hereunder or under a Supplemental Indenture by a written instrument of acceptance delivered to the Authority and the Trustee under which such Registrar will agree, particularly, to keep such books and records as shall be consistent with prudent corporate trust industry practice and to make such books and records available for inspection by the Authority, the Trustee, and the Paying Agent on each Business Day during reasonable business hours.

Section 9.13. Other Agents. The Authority, or the Trustee with the consent of the Authority, may from time to time appoint other agents as may be appropriate at the time to perform duties and obligations under this Indenture or under a Supplemental Indenture all as provided by a Supplemental Indenture or resolution of the Authority.

Section 9.14. Several Capacities. Anything in this Indenture to the contrary notwithstanding, with the consent of the Authority, the same entity may serve hereunder as the Trustee, Paying Agent, Registrar and any other agent as appointed to perform duties or obligations under this Indenture, under a Supplemental Indenture or an escrow agreement, or in any combination of such capacities, to the extent permitted by law. The Paying Agent and the Registrar shall be entitled to the same protections, limitations from liability and indemnities afforded to the Trustee under this Indenture.

Section 9.15. Accounting Records and Reports of the Trustee.

(a) The Trustee shall at all times keep, or cause to be kept, proper records in which complete and accurate entries shall be made of all transactions made by it relating to the proceeds of the Bonds and all funds and accounts established by it pursuant to this Indenture. Such records shall be available for inspection with reasonable prior notice by the Authority on each Business Day during reasonable business hours and by any Bondholder, or his agent or representative duly authorized in writing, at reasonable hours, with reasonable notice and under reasonable circumstances.

(b) The Trustee shall provide to the Authority each month a report of any Bond proceeds received during that month, if any, and the amounts deposited into each Fund, Account and Subaccount held by it under this Indenture and the amount disbursed from such Funds, Accounts and Subaccounts, the earnings thereon, the ending balance in each of such Funds, Accounts and Subaccounts and the investments of each such Fund, Account and Subaccount.

ARTICLE X

MODIFICATION OF THIS INDENTURE

Section 10.01. Limitations. This Indenture shall not be modified or amended in any respect except as provided in and in accordance with and subject to the provisions of this Article X.

Section 10.02. Supplemental Indentures Not Requiring Consent of Bondholders. The Authority may, from time to time and at any time, without the consent of or notice to the Bondholders, execute and deliver Supplemental Indentures supplementing and/or amending this Indenture or any Supplemental Indenture as follows:

(a) to provide for the issuance of a Series or multiple Series of Bonds under the provisions of Section 2.09 hereof and to set forth the terms of such Bonds and the special provisions which shall apply to such Bonds;

(b) to cure any formal defect, omission, inconsistency or ambiguity in, or answer any questions arising under, this Indenture or any Supplemental Indenture, provided such supplement or amendment is not materially adverse to the Bondholders;

(c) to add to the covenants and agreements of the Authority in this Indenture or any Supplemental Indenture other covenants and agreements, or to surrender any right or power reserved or conferred upon the Authority, provided such supplement or amendment shall not adversely affect the interests of the Bondholders;

(d) to confirm, as further assurance, any interest of the Trustee in and to the pledge of Net Revenues or in and to the Funds, Accounts and Subaccounts held by the Trustee or in and to any other moneys, securities or funds of the Authority provided pursuant to this Indenture or to otherwise add additional security for the Bondholders;

(e) to evidence any change made in the terms of any Series of Bonds if such changes are authorized by the Supplemental Indenture at the time the Series of Bonds is issued and such change is made in accordance with the terms of such Supplemental Indenture;

(f) to comply with the requirements of the Trust Indenture Act of 1939, as amended from time to time;

(g) to modify, alter, amend or supplement this Indenture or any Supplemental Indenture in any other respect which is not materially adverse to the Bondholders;

(h) to qualify the Bonds or a Series of Bonds for a rating or ratings from a Rating Agency;

(i) to accommodate the technical, operational and structural features of Bonds which are issued or are proposed to be issued, including, but not limited to, changes needed to accommodate commercial paper, auction bonds, swaps, variable rate or adjustable rate bonds, discounted or compound interest bonds or other forms of indebtedness which the Authority from time to time deems appropriate to incur;

(j) to make modifications or adjustments necessary, appropriate or desirable to accommodate the use of a Credit Facility or Liquidity Facility for specific Bonds or a specific Series of Bonds;

(k) to provide for the issuance of the Bonds pursuant to a book-entry system or as uncertified registered public obligations pursuant to the provisions of 13 Pa.C.S. Section 8407, as amended, or any successor provision of the law;

(l) to comply with the requirements of the Code as are necessary, in the opinion of Bond Counsel, to prevent the federal income taxation of the interest on the Bonds, including, without limitation, the segregation of Revenues into different funds;

(m) for purposes of modifying and/or creating additional funds and accounts to be inserted below Section 4.03(b)(v) hereof; and

(n) for any other purpose that does not materially and adversely affect the interests of the Owners of the Bonds.

Before the Authority shall, pursuant to this Section 10.02, execute any Supplemental Indenture, there shall have been delivered to the Authority and Trustee an opinion of Bond Counsel to the effect that such Supplemental Indenture: (y) is authorized or permitted by this Indenture and other applicable law, complies with their respective terms, will, upon the execution and delivery thereof, be valid and binding upon the Authority in accordance with its terms and (z) will not cause interest on any of the Bonds which is then excluded from gross income of the recipient thereof for federal income tax purposes to be included in gross income for federal income tax purposes. The opinion of Bond Counsel required pursuant to clause (z) in the preceding sentence shall not be required for a Supplemental Indenture executed and delivered in accordance with Section 10.02(a) hereof.

Section 10.03. Supplemental Indenture Requiring Consent of Bondholders.

(a) Except for any Supplemental Indenture entered into pursuant to Section 10.02 hereof and any Supplemental Indenture entered into pursuant to Section

10.03(b) below, subject to the terms and provisions contained in this Section 10.03 and Article XI hereof and not otherwise, the holders of not less than 51% in aggregate Principal Amount of the Bonds then Outstanding shall have the right from time to time to consent to and approve the execution by the Authority of any Supplemental Indenture deemed necessary or desirable by the Authority for the purposes of modifying, altering, amending, supplementing or rescinding any of the terms or provisions contained in this Indenture or in a Supplemental Indenture; provided, however, that, unless approved in writing except as otherwise provided herein, by the holders of all the Bonds then Outstanding or unless such change affects less than all Series of Bonds and the following subsection (b) is applicable, nothing herein contained shall permit, or be construed as permitting, (i) a change in the scheduled times, amounts or currency of payment of the principal of or interest on any Outstanding Bonds, or (ii) a reduction in the principal amount or redemption price of any Outstanding Bonds or the rate of interest thereon, or (iii) provided that nothing herein contained, including the provisions of subsection (b) below, shall, unless approved in writing by the holders of all the Bonds then Outstanding, permit or be construed as permitting the creation of a lien (except as expressly permitted by this Indenture) upon or pledge of the Net Revenues created by this Indenture, ranking prior to or on a parity with the claim created by this Indenture, or (iv) except with respect to additional security which may be provided for a particular Series of Bonds, a preference or priority of any Bond or Bonds over any other Bond or Bonds with respect to the security granted therefor under the Granting Clauses hereof, or (v) a reduction in the aggregate Principal Amount of Bonds the consent of the Bondholders of which is required for any such Supplemental Indenture. Nothing herein contained, however, shall be construed as making necessary the approval by Bondholders of the execution of any Supplemental Indenture as authorized in Section 10.02 hereof, including the granting, for the benefit of particular Series of Bonds, security in addition to the pledge of the Net Revenues.

(b) The Authority may, from time to time and at any time, execute a Supplemental Indenture which amends the provisions of an earlier Supplemental Indenture under which a Series or multiple Series of Bonds were issued. If such Supplemental Indenture is executed for one of the purposes set forth in Section 10.02 hereof, no notice to or consent of the Bondholders shall be required. If such Supplemental Indenture contains provisions which affect the rights and interests of less than all Series of Bonds Outstanding and Section 10.02 hereof is not applicable, then this subsection (b) rather than subsection (a) above shall control and, subject to the terms and provisions contained in this subsection (b) and Article XI hereof and not otherwise, the holders of not less than 51% in aggregate Principal Amount of the Bonds of all Series which are affected by such changes shall have the right from time to time to consent to any Supplemental Indenture deemed necessary or desirable by the Authority for the purposes of modifying, altering, amending, supplementing or rescinding any of the terms or provisions contained in such Supplemental Indenture and affecting only the Bonds of such Series; provided, however, that, unless approved in writing except as otherwise provided herein, by the holders of all the Bonds of all the affected Series then Outstanding, nothing herein contained shall permit, or be construed as permitting, (i) a change in the scheduled times, amounts or currency of payment of the principal of or interest on any Outstanding Bonds of such Series or (ii) a reduction in the principal amount or redemption price of any Outstanding Bonds of such Series or the rate of interest thereon. Nothing herein contained, however, shall be construed as making necessary the approval by Bondholders of the adoption of any Supplemental Indenture as authorized in Section 10.02 hereof, including the granting, for the benefit of particular Series of Bonds, security in addition to the pledge of the Net Revenues.

(c) If at any time the Authority shall desire to enter into any Supplemental Indenture for any of the purposes of this Section 10.03, the Authority shall cause notice of the proposed execution of the Supplemental Indenture to be given by Mail (or such other approved delivery method) to all Bondholders or, under subsection (b), all Bondholders of the affected Series. Such notice shall briefly set forth the nature of the proposed Supplemental Indenture and shall state that a copy thereof is on file at the office of the Authority for inspection by all Bondholders and it shall not be required that the Bondholders approve the final form of such Supplemental Indenture but it shall be sufficient if such Bondholders approve the substance thereof.

(d) The Authority may execute and deliver such Supplemental Indenture in substantially the form described in such notice, but only if there shall have first been delivered to the Authority (i) the required consents, in writing, of Bondholders and (ii) the opinion of Bond Counsel required by the last paragraph of Section 10.02 hereof.

(e) If Bondholders of not less than the percentage of Bonds required by this Section 10.03 shall have consented to and approved the execution and delivery thereof as herein provided, no Bondholders shall have any right to object to the execution of such Supplemental Indenture, or to object to any of the terms and provisions contained therein or the operation thereof, or in any manner to question the propriety of the execution and delivery thereof, or to enjoin or restrain the Authority from executing the same or from taking any action pursuant to the provisions thereof.

(f) Notwithstanding subsections (c) through (e) above, the Authority may, at its discretion, execute and deliver such Supplemental Indenture which contains such modifications, alterations, amendments or supplements prior to receipt of the required consents in writing, of the Bondholders; provided, that such Supplemental Indenture or the applicable provisions of such Supplemental Indenture subject to the consents of the Holders shall not become effective until such time as there has been delivered to the Authority (i) the required consents, in writing, of Bondholders and (ii) the opinion of Bond Counsel required by the last paragraph of Section 10.02 hereof. In the event the Authority decides to execute and deliver a Supplemental Indenture in accordance with this subsection (f), the notice required in subsection (c) shall make reference to a final and executed Supplemental Indenture as opposed to a proposed Supplemental Indenture.

(g) For the purposes of this Section 10.03 the purchasers of the Bonds of a Series, whether purchasing as underwriters, for resale or otherwise, upon such purchase from the Authority, may consent to a modification or amendment permitted by this Section 10.03 in the manner provided herein and with the same effect as a consent given by the Owner of such Bonds, except that no proof of ownership shall be required; provided, that this provision of Section 10.03 shall be disclosed prominently in the offering document, if any, for each Series of Bonds issued pursuant to this Indenture, provided that, if such consent is given by a purchaser who is purchasing as an underwriter or for resale, the nature of the modification or amendment and the provisions for the purchaser consenting thereto shall be described in the offering document prepared in connection with the primary offering of the Bonds of such Series by the Authority.

Section 10.04. Effect of Supplemental Indenture. Upon execution and delivery of any Supplemental Indenture pursuant to the provisions of this Article X, this Indenture or the Supplemental Indenture shall be, and shall be deemed to be, modified and amended in accordance therewith, and the respective rights, duties and obligations under this Indenture and the Supplemental Indenture of the Authority, the Trustee, the Paying Agent, the Registrar and all Bondholders and beneficial owners shall thereafter be determined, exercised and enforced under this Indenture and the Supplemental Indenture, if applicable, subject in all respects to such modifications and amendments.

No Supplemental Indenture shall modify the duties, rights or obligations of the Trustee, Paying Agent or Registrar without the consent of such party thereto.

Section 10.05. Supplemental Indentures to be Part of this Indenture. Any Supplemental Indenture entered into accordance with the provisions of this Article X shall thereafter form a part of this Indenture or the Supplemental Indenture which they supplement or amend, and all of the terms and conditions contained in any such Supplemental Indenture as to any provision authorized to be contained therein shall be and shall be deemed to be part of the terms and conditions of this Indenture or the Supplemental Indenture which they supplement or amend for any and all purposes.

ARTICLE XI

CREDIT PROVIDERS

If a Credit Facility is provided for a Series of Bonds or for specific Bonds, the Authority may in the Supplemental Indenture under which such Bonds are issued, provide any or all of the following rights to the Credit Provider as the Authority shall deem to be appropriate:

(a) the right to make requests of, direct or consent to the actions of the Trustee or to otherwise direct proceedings all as provided in Article VIII hereof to the same extent and in place of the Owners of the Bonds which are secured by the Credit Facility and for such purposes the Credit Provider shall be deemed to be the Holder of such Bonds;

(b) the right to act in place of the Owners of the Bonds which are secured by the Credit Facility for purposes of removing a Trustee or appointing a Trustee under Article IX hereof; and

(c) the right to consent to Supplemental Indentures to the same extent and in place of the Holders of the Bonds, which require the consent of the Holders of not less than 51% of the aggregate Principal Amount of the Bonds, entered into pursuant to Section 10.03 hereof, except with respect to any amendments described in Sections

10.03(a)(i) through (v) and 10.03(b)(i) or (ii) hereof which consent of the actual Holders shall still be required, of this Indenture to the same extent and in place of the Holders of the Bonds which are secured by the Credit Facility and for such purposes the Credit Provider shall be deemed to be the Holder of such Bonds.

The rights granted to any such Credit Provider, with respect to the provisions of Articles VIII and XI hereof shall be disregarded and be of no effect if the Credit Provider is in default of its payment obligations under its Credit Facility or fails to maintain its rating at a level higher than the underlying rating on the Bonds.

ARTICLE XII

MISCELLANEOUS PROVISIONS

Section 12.01. Parties in Interest. Except as otherwise specifically provided herein, nothing in this Indenture expressed or implied is intended or shall be construed to confer upon any person, firm or corporation other than the Authority, the Trustee, the Paying Agent, other agents from time to time hereunder, the Bondholders and, to the limited extent provided by Supplemental Indenture, the Credit Providers any right, remedy or claim under or by reason of this Indenture, this Indenture being intended to be for the sole and exclusive benefit of the Authority, the Trustee, the Paying Agent, such other agents, the Bondholders and, to the limited extent provided in the applicable Supplemental Indenture, the Credit Providers.

Section 12.02. Severability. In case any one or more of the provisions of this Indenture, or of any Bonds issued hereunder shall, for any reason, be held to be illegal or invalid, such illegality or invalidity shall not affect any other provisions of this Indenture or of Bonds, and this Indenture and any Bonds issued hereunder shall be construed and enforced as if such illegal or invalid provisions had not been contained herein or therein.

Section 12.03. No Personal Liability of Authority Members and Officials; Limited Liability of Authority to Bondholders. No covenant or agreement contained in the Bonds or in this Indenture shall be deemed to be the covenant or agreement of any present or future Board member, official, officer, agent or employee of the Authority, or the Airport System, in their individual capacity, and neither the members of the Board, the officers and employees of the Authority, nor any person executing the Bonds shall be liable personally on the Bonds or be subject to any personal liability or accountability by reason of the issuance thereof.

Section 12.04. Execution of Instruments; Proof of Ownership. Any request, direction, consent or other instrument in writing required or permitted by this Indenture to be signed or executed by Bondholders or on their behalf by an attorney-in-fact may be in any number of concurrent instruments of similar tenor and may be signed or executed by such Bondholders in person or by an agent or attorney-in-fact appointed by an instrument in writing or as provided in the Bonds. Proof of the execution of any such instrument and of the ownership of Bonds shall be sufficient for any purpose of this Indenture and shall be conclusive in favor of the Trustee with regard to any action taken by it under such instrument if made in the following manner:

(a) The fact and date of the execution by any person of any such instrument may be proved by the certificate of any officer in any jurisdiction who, by the laws thereof, has power to take acknowledgments within such jurisdiction, to the effect that the person signing such instrument acknowledged before him the execution thereof, or by an affidavit of a witness to such execution.

(b) The ownership of Bonds shall be proved by the registration books kept under the provisions of Section 2.04 hereof.

Nothing contained in this Section 12.04 shall be construed as limiting the Trustee to such proof. The Trustee may accept any other evidence of matters herein stated which it may deem sufficient. Any request, consent of, or assignment by any Bondholder shall bind every future Bondholder of the same Bonds or any Bonds issued in lieu thereof in respect of anything done by the Trustee or the Authority in pursuance of such request or consent.

Section 12.05. Governing Law. The laws of the Commonwealth shall govern the construction and enforcement of this Indenture and of all Bonds issued hereunder.

Section 12.06. Notices. Except as otherwise provided in this Indenture, all notices, certificates, requests, requisitions or other communications by the Authority, the Trustee, the Paying Agent, the Registrar, other agents or a Credit Provider, pursuant to this Indenture shall be in writing and shall be sufficiently given and shall be deemed given when mailed by registered mail, postage prepaid, addressed as follows: if to the Authority, to Allegheny County Airport Authority, Attention: Chief Financial Officer, by delivery or by mail, Landside Terminal, 4th Floor Mezzanine P.O. Box 12370, Pittsburgh, Pennsylvania, 15231-0370, with a copy to the Authority Attorney, Attention Jeffrey W. Letwin, Saul Ewing Arnstein & Lehr LLP, One PPG Place, Suite 3010 Pittsburgh, Pennsylvania 15222; if to the Trustee, to The Bank of New York Mellon Trust Company, N.A., Attention: Corporate Trust Department, by delivery or by mail, 500 Ross Street, 12th Floor, Pittsburgh, Pennsylvania 15262; if to a Paying Agent, or another agent, to such address as is designated in writing by it to the Trustee and the Authority. Any of the foregoing may, by notice given hereunder to each of the others, designate any further or different addresses to which subsequent notices, certificates, requests or other communications shall be sent hereunder.

Section 12.07. Holidays. If the date for making any payment or the last date for performance of any act or the exercising of any right, as provided in this Indenture, shall not be a Business Day, such payment may, unless otherwise provided in this Indenture or, with respect to any Series of Bonds or portion of Series of Bonds, provided in the Supplemental Indenture under which such Bonds are issued, be made or act performed or right exercised on the next succeeding Business Day with the same force and effect as if done on the nominal date provided in this Indenture; provided that no interest shall accrue between the scheduled date of payment and the actual date of payment.

Section 12.08. Counterparts. This Indenture may be signed in several counterparts. Each will be an original, but all of them together constitute the same instrument.

Section 12.09. Representation Regarding Ethical Standards for Authority Officers and Employees and Former Authority Officers and Employees. The Trustee represents that it has not: (a) provided an illegal gift or payoff to a Authority officer or employee or former Authority officer or employee, or his or her relative or business entity; (b) retained any person to solicit or secure the Trustee's appointment under this Indenture upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, other than bona fide employees or bona fide commercial selling agencies for the purpose of securing business; (c) knowingly breached any of the ethical standards set forth in the Authority's conflict of interest policy; or (d) knowingly influenced, and hereby promises that it will not knowingly influence, an Authority officer or employee or former Authority officer or employee to breach any of the ethical standards set forth in the Authority's conflict of interest policy.

IN WITNESS WHEREOF, the parties hereto have caused this Master Trust Indenture to be duly executed, all as of the date first above written.

ALLEGHENY COUNTY AIRPORT AUTHORITY

By: ______________________________

Name: Christina A. Cassotis

Title: Chief Executive Officer

Attest:

By: ______________________________

Name: Ashley Henry Shook

Title: Secretary of the Board

Approved as to form:

By: ______________________________

Name: Jeffrey Letwin

Title: Authority Attorney

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee

By: ____
Name: Rhonda J. Brannon
Title: Authorized Representative

APPENDIX D

FORM OF AIRLINE OPERATING AGREEMENT

UNOFFICIAL CONSOLIDATED VERSION

PITTSBURGH INTERNATIONAL AIRPORT

Airline Operating Agreement
and Terminal Building Lease

as amended by First Amendment dated as of June 16, 2021

This version of the Airline Operating Agreement and Terminal Building Lease ("AOA") includes the provisions of the First Amendment to the AOA for ease of administration, but is not an official, executed agreement.

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EXHIBITS

EXECUTION COPY

AIRLINE OPERATING AGREEMENT AND TERMINAL BUILDING LEASE

This Airline Operating Agreement and Terminal Building Lease (this "***Agreement***"), dated ______________, 2020, entered into by and between the Allegheny County Airport Authority, a body politic organized under the Municipal Authorities Act of 1945 (the "***Authority***" or "***ACAA***") and ____, a ____________________________ corporation (the "***Airline***").

WITNESSETH:

WHEREAS, the Authority is successor-in-interest to Allegheny County (the "***County***") pursuant to the Airport Operation, Management and Transfer Agreement and Lease (the "***Lease Agreement***") dated September 16, 1999 entered into by and between the County and the Authority and the Authority operates, pursuant to the Lease Agreement, an airport known as the Pittsburgh International Airport as shown on **Exhibit A** (the "***Airport***" or "***PIT***") and has the power to grant rights and privileges with respect thereto;

WHEREAS, the Authority has the right to lease premises at and facilities of the Airport and to grant rights, licenses, and privileges on and in connection therewith and has full power and authority to enter into this Agreement;

WHEREAS, Airline is engaged in operating an Air Transportation Business at the Airport;

WHEREAS, the Authority plans to design, finance, and construct a new landside terminal facility to replace the existing landside terminal that will be integrated with the existing airside terminal at the Airport, as well as appurtenant parking, rental car, and roadway facilities as described in **Exhibit I** and known as the Terminal Modernization Program (the "***Project***" or "***TMP***");

WHEREAS, the Authority and Airline have been operating under the Airline Operating Agreement and Terminal Building Lease terminating by its terms as of May 8, 2018, as modified and extended by the Master Extension and Amendment Agreement to the Airline Operating Agreement and Terminal Building Lease (the "***Prior Agreement***");

WHEREAS, the Authority and Airline desire to set forth their agreement regarding the design, financing, and construction of the TMP, the leasing by Airline of certain premises and facilities in the existing terminal facilities until the Date of Beneficial Occupancy ("***DBO***") of the Project, the leasing of certain premises and facilities in the new terminal facilities on and after DBO of the Project, the granting by the Authority and acquiring by Airline of certain rights, licenses, and privileges with respect to the existing and the new facilities, and the respective rights and obligations of the Authority and Airline regarding the use and operation of the Airport;

WHEREAS, the Prior Agreement terminates as of the Effective Date and Airline and the Authority agree as follows relating to the use and lease of the Terminal and airside facilities at the Airport and enter into this Agreement setting forth the rights and obligations of the Authority and Airline with respect to the operation of the Airport and the use and occupancy of the Airport;

NOW, THEREFORE, in consideration of the mutual covenants, terms, privileges, and obligations set forth herein, the Authority and Airline hereby agree as follows:

ARTICLE 1
DEFINITIONS

Section 1.01 Definitions.

Except as otherwise clearly indicated by the context, the words and phrases defined in this Section shall have the following meanings when used elsewhere in this Agreement.

"***ACAA Area***" means all land and facilities at the Airport, other than the land and facilities included in the Airfield Area and the Terminal Area, as depicted on **Exhibits B-1** and **B-2**.

"***ACAA Loan***" means the funds advanced by the Authority from its discretionary revenues and other legally available sources to defease the Authority's debt outstanding as of December 18, 2019 that shall be repaid through Airline Fees and Charges as set forth in **Exhibit E** beginning in Fiscal Year 2021 in an amount intended to cause total Airline Fees and Charges to be, in the Authority's judgment, substantially as level as possible.

"***Affiliate***" means any Air Carrier that flies in and out of the Airport on behalf of a Signatory Airline and (i) is providing transportation of property or passengers for the Signatory Airline (a) under essentially the same trade name of such Signatory Airline or the trade name of the parent company or wholly-owned subsidiary of the Signatory Airline, or (b) using essentially the same livery as a Signatory Airline, (ii) if flying under its own name at the Airport, is not selling any seats in its own name and all seats are being sold in the name of the Signatory Airline, or (iii) is the parent company or wholly owned subsidiary of the designating Signatory Airline.

"***AGC Cap***" means a deficit or surplus in net operating revenues at AGC of no more than Six Hundred Thousand Dollars ($600,000); provided, however that the AGC Cap shall be increased each year by the increase in CPI between the Effective Date and the date of calculation, as provided in Section 7.06.

"***Agreement***" means, as the context may require, (i) this Airline Operating Agreement and Terminal Building Lease, as it may hereafter be supplemented or amended as provided herein, between the Authority and the Airline and (ii) each other airport use and lease agreement, with respect to the Airport, that is substantially the same as this Agreement (except with respect to the location, size, and identity of the Leased Premises) entered into between the Authority and a Signatory Airline.

"***Air Carrier***" means any air carrier or foreign air carrier, as defined in 49 U.S.C. §40102, as amended, operating an Air Transportation Business from time to time at the Airport.

"***Air Transportation Business***" means the carriage by aircraft of persons or property as a common carrier for compensation or hire, or the carriage of cargo or mail, by aircraft, in air commerce, as defined in 49 U.S.C. §40102, as amended.

"***Airfield***" or "***Airfield Area***" means those portions of the Airport depicted on **Exhibits B-1** and **B-2** providing for (i) the landing, taking off, and taxiing of aircraft, excluding the Terminal Ramp but including, among other assets, approach and turning zones, runway protection zones, safety areas, infield areas, landing and navigational aids, airfield service roads, fencing, buffer areas, non-terminal deicing facilities, deicing reclamation facilities, clear zones, avigation or other easements, air operations area access and perimeter roads, runways, the taxiway system, runway and taxiway lights, the fire and crash rescue support facilities, and other appurtenances related to the aeronautical use of the Airport, including property purchased for noise mitigation purposes and not included in the ACAA Area; (ii) hangars for scheduled airlines and other tenants, including related special purpose taxiway and ramp areas; access roads and lighting; in-flight kitchen areas; aircraft fuel farm, fuel distribution system, and automotive fuel storage; the airmail facility; and the industrial waste treatment facility and containment pond; and (iii) United States Air Force and Pennsylvania Air National Guard Installations and the Pennsylvania Air National Guard Alert Hangar, as such area may be designated from time to time by the Authority in its reasonable discretion. Costs allocable to the Airfield shall also include any Costs incurred by the Authority for noise mitigation purposes.

"***Airline Fees and Charges***" means, for any period, the aggregate of the rates, fees, and charges that the Signatory Airlines are charged pursuant to this Agreement to operate at the Airport; provided, however, that when used with reference to an individual Signatory Airline, "Airline Fees and Charges" shall mean only those rates, fees, and charges payable by such Signatory Airline.

"***Airline Parties***" means, collectively, Airline, and any of its Affiliates, officers, volunteers, representatives, agents, employees, contractors, subcontractors, licensees, subtenants, invitees, or suppliers.

"***Airline Technical Representative***" or "***ATR***" shall mean the person serving as the technical representative of the Signatory Airlines with respect to the design, development and construction of the Project or, if such person resigns or is not available, the Chair of the PIT Airport Affairs Committee.

"***Airport***" or "***PIT***" means the Pittsburgh International Airport, as it now exists and is shown on **Exhibit A** and as it may hereafter be changed, modified or expanded in accordance with the terms hereof.

"***Airport System***" means the Airport and Allegheny County Airport.

"***Airport System Capital Fund***" means the fund of such name created pursuant to the Indenture for the funding of capital expenditures and any other lawful Airport System purpose.

"***Airport System Capital Fund Deposit Requirement***" means an amount equal to (i) Nine Million Seven Hundred Thirty-Seven Thousand Five Hundred Dollars ($9,737,500) for Fiscal Year 2021, adjusted annually starting in Fiscal Year 2022 and continuing until the first full Fiscal

Year after DBO, by the greater of three percent (3%) or the increase in CPI as provided in Section 7.06 and (ii) Five Million Dollars ($5,000,000) for the first full Fiscal Year after DBO, adjusted annually for each Fiscal Year thereafter by the greater of three percent (3%) or the increase in CPI as provided in Section 7.06. The annual amount required in the Fiscal Year in which DBO occurs shall be proportioned based upon the number of months in the respective pre-DBO and post-DBO periods.

"***All Cargo Air Carrier***" means an Air Carrier engaged in the carriage by aircraft of property, but not persons, as a common carrier for compensation or hire, or the carriage of mail, by aircraft, in air commerce, as defined in 49 U.S.C. §40102, as amended.

"***Allegheny County Airport***" or "***AGC***" means the airport operated by the Authority and located in West Mifflin, Pennsylvania, that serves as the general aviation reliever airport to PIT (as designated by the FAA), together with any additions thereto or enlargements thereof, as long as such airport is a part of the Airport System.

"***Applicable Law***" means all laws, statutes, ordinances, rules, and regulations (including without limitation Environmental Laws) issued or promulgated by any Governmental Authority governing or otherwise applicable to Airline or the Airport, as any of the same may now exist or may hereafter be adopted or amended, modified, extended, re-enacted, re-designated, or replaced from time to time, and judicial interpretations thereof.

"***Automated Baggage System***" means, prior to DBO, the automated inbound/outbound north baggage system which conveys baggage to and from the landside building to the airside building in the Terminal via mechanized conveyor systems and an underground tunnel to a baggage makeup facility located in the airside terminal and concourse arms.

"***Baggage System***" means that portion of the Terminal, other Airport space, and all facilities and equipment used to process outbound and inbound passenger bags, including in-line baggage handling system, bag claim, and bag drop off facilities.

"***Bonds***" means all notes, bonds or other obligations or indebtedness issued pursuant to and secured by a pledge of revenues or net revenues of the Airport System, on either a senior or subordinate basis, under the Indenture. The term "Bonds" does not include other bonds, such as special facility revenue bonds, that are not secured by general Airport System revenues and are issued pursuant to a separate indenture, which may be issued to finance Capital Projects at or related to the Airport System.

"***Capital Project***" means any expenditure made to acquire, purchase or construct a single capital item or project for the purpose(s) of improving, developing, preserving, or enhancing the Airport System and having a net cost to Authority in excess of One Million Dollars ($1,000,000) and a useful life in excess of one (1) year; provided, that the One Million Dollars ($1,000,000) amount shall be adjusted annually beginning the first day of the next Fiscal Year beginning after the Effective Date and for each succeeding Fiscal Year by the increase in CPI as provided in Section 7.06.

"***CARES Act Funds***" means grant funds received by the Authority from the Federal government pursuant to the Coronavirus Aid, Relief, and Economic Security Act of 2020 for the reimbursement of operating expenses, debt service or capital expenditures.

"***CEO***" means the Chief Executive Officer of the Authority or any successor or successors to the duties of such official or her or his duly authorized designee.

"***Commencement Date***" means the Effective Date or, if Airline executes this Agreement after the Grace Period (as defined in Section 5.01), the first day of the first month after the date Airline executes this Agreement.

"***Common Use Baggage Charges***" means charges payable by the Air Carriers on and after DBO for use of the Baggage System, which shall be calculated using the sum total of square feet of Common Use Baggage Premises multiplied by the Terminal Rental Rate per square foot, plus Costs allocable to the Baggage System.

"***Common Use Baggage Premises***" means those non-exclusive and non-preferential areas of the Airport for the Baggage System that are used in common by Airline and other authorized users of the Airport, along with all facilities, improvements, equipment, and services available and paid by Common Use Baggage Charges in areas designated as Common Use Baggage Premises, as shown in **Exhibit C-1** (pre-DBO) or **Exhibit C-3** (after DBO), as applicable, attached hereto, as such areas may be amended from time to time.

"***Common Use Facilities***" means airline space not leased to an Air Carrier, other than Preferential Use Premises, Exclusive Use Premises, Shared Use Premises and Joint Use Premises or Common Use Baggage Premises, that is assigned by the Authority from time to time for use and occupancy by an Air Carrier and paid for on a per Turn basis, and shall include, for example, ticket counters, holdrooms, Terminal Ramp and Loading Bridges. Common Use Facilities may be designated as such from time to time in the Rules and Regulations.

"***Commonwealth***" means the Commonwealth of Pennsylvania.

"***Concession Incentive Fee***" means an amount equal to six percent (6%) of the gross revenues received by the Authority from the Terminal Area, Airfield Area, or AGC cost centers derived from concessions, including, but not limited to, news and gifts, retail, food, beverage, parking, rental car, ground transportation (such as taxis, limousines, and transportation network companies), advertising, ground handling, non-aeronautical leases, fuel sales, and other permits or licenses, but excluding CFC Revenues, during any given Fiscal Year.

*"**Consumer Price Index**" or "**CPI**"* means the consumer price index for all urban consumers (or "CPI-U") published by the U.S. Bureau of Labor Statistics for the most current 12-month period such data is available at the time of the applicable measurement or adjustment under this Agreement. If CPI is no longer calculated by the Bureau of Labor Statistics, the CEO shall, in her or his reasonable judgement, select such other index as may be generally published that measures the increase in consumer costs, which index shall be substituted for CPI.

"***Cost Centers***" means those distinct areas or functional activities of the Airport as shown on **Exhibit B-1** (before DBO) and **Exhibit B-2** (after DBO), plus AGC, as established by the

Authority from time to time, and as used for the purposes of accounting for Airport revenues, O&M Expenses, Debt Service, Coverage Requirement, Fund Deposit Requirements, and other expenses provided herein, and for calculating Airline Fees and Charges. The Cost Centers consist of the following:

(1) Airfield Area Cost Center,

(2) Terminal Area Cost Center,

(3) ACAA Cost Center, and

(4) Allegheny County Airport (or AGC) Cost Center.

"***Costs***" mean, for any period, direct and indirect O&M Expenses; any revenues when more than 90 days past due and deemed by the Authority to be uncollectable (after the Authority uses commercially reasonable efforts to collect the same) (bad debt expense); the O&M Reserve Requirement (after giving effect to amounts on deposit in the O&M Reserve Fund); Debt Service; Coverage Requirement; Capital Projects approved under Section 9.03; Fund Deposit Requirements; the estimated amount of defending, settling, or satisfying any threatened litigation, litigation, assessment, judgment, settlement, or charge net of estimated insurance proceeds to become payable to Authority relating directly to the Airport System or its operation reduced by all amounts, if any, received by the Authority of any judgments or settlements arising as a result of the Authority's ownership, operation, and maintenance of the Airport System payable during said period; and any and all other sums, amounts, charges, or requirements of the Authority required to be recovered, charged, set aside, expensed, or accounted for, from the Signatory Airlines, during such period by either this Agreement or the Indenture; provided, however, Costs shall not include any amounts described above related to any Special Facility in any Cost Center except as such may be provided for in a supplemental indenture**.**

"***Coverage Requirement***" means, for any Fiscal Year (i) such amount as may be established by the Indenture or another financing agreement with respect to other indebtedness as the minimum amount required to be collected in any Fiscal Year in order to meet the rate covenant of the Indenture, less (ii) the amount available to be used for the Coverage Requirement on deposit in the fund(s) or account(s) established by the Indenture to hold funds used to satisfy the Coverage Requirement on the last day of the previous Fiscal Year after the satisfaction of all Fund Deposit Requirements for such Fiscal Year and after satisfaction of any reimbursement obligations of the Authority to the Signatory Airlines pursuant to Section 7.04.

"***Customer Facility Charge***" or "***CFC***" means a charge imposed by the Authority from time to time on customers of rental car companies operating at the Airport, and interest, profits and other income derived from the investment thereof.

"***Date of Beneficial Occupancy***" or "***DBO***" means the date on which the Authority and Signatory Airlines relocate operations from the existing landside terminal to the new landside terminal.

"***Debt Service***" means, for any period, the amounts required to be deposited within the fund or funds created by the Indenture, for the payment of principal of, interest on, and other fees and amounts associated with Bonds, the ACAA Loan or other indebtedness.

"***Debt Service Reserve Fund***" means one or more funds created pursuant to the Indenture to provide financial reserves to pay Debt Service in the event of a shortfall.

"***Deplaned Passengers***" means all passengers disembarking an aircraft from a flight operated by an Air Carrier or its Affiliates, including all connecting passengers.

"***Effective Date***" means January 1, 2020.

"***Enplaned Passengers***" means all passengers boarding an aircraft for a flight operated by an Air Carrier or its Affiliates, including connecting passengers that depart from the Airport.

"***Environmental Laws***" shall mean and include all applicable Federal, Commonwealth, and local statutes, ordinances, regulations, and rules relating to environmental quality, health, safety, contamination and clean-up, as they currently exist or may exist in the future, including, without limitation, the Clean Air Act, 42 U.S.C. §7401 *et seq.*; the Clean Water Act, 33 U.S.C. §1251 *et seq.*, and the Water Quality Act of 1987; the Federal Insecticide, Fungicide, and Rodenticide Act ("***FIFRA***"), 7 U.S.C. §136 *et seq.*; the Noise Control Act, 42 U.S.C. §4901 *et seq.*; the Resource Conservation and Recovery Act ("***RCRA***"), 42 U.S.C. §6901 *et seq.*, as amended by the Hazardous and Solid Waste Amendments of 1984; the Safe Drinking Water Act, 42 U.S.C. §300f *et seq.*; the Comprehensive Environmental Response, Compensation and Liability Act ("***CERCLA***"), 42 U.S.C. §9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act, the Emergency Planning and Community Right to Know Act, and the Radon Gas and Indoor Air Quality Research Act; the Hazardous Material Transportation Act, 49 U.S.C. §9601 *et seq.*; the Toxic Substance Control Act ("**T*SCA***"), 15 U.S.C. §2601 *et seq.*; all Commonwealth environmental protection, superlien, and environmental clean-up statutes, with implementing regulations and guidelines, and all local laws, regulations, and ordinances insofar as they are equivalent or similar to the federal laws recited above or purport to regulate Hazardous Materials, and judicial interpretations of each of the foregoing.

"***Equipment and Capital Outlay Fund***" means the fund of the same name.

"***Equipment and Capital Outlay Fund Deposit Requirement***" means, for any Fiscal Year commencing on and after January 1, 2020, an amount equal to the sum of: (i) Three Million Dollars ($3,000,000) as such amount is increased by CPI for each subsequent Fiscal Year pursuant to Section 7.06; and (ii) an amount equal to the direct charges for such Fiscal Year for any capital outlay or equipment purchase for the Airport System approved by a Majority-in-Interest pursuant to Section 9.03.

"***Event of Default***" means any event described in Paragraphs A, C or D of Section 15.01.

"***Exclusive Use Premises***" means those premises leased to Airline in which Airline has a power, privilege, or other right authorized under this Agreement to exclude another person from enjoying or exercising a like power, privilege, or right pursuant to Section 3.01(A) or 3.01(B), as applicable, including offices, clubs, special services premises, and breakrooms, as applicable.

"***Expiration Date***" means the Scheduled Expiration Date or an earlier date if this Agreement is terminated sooner pursuant to the provisions herein.

"***Facility Fee***" means the per Turn fee for use of the Common Use Facilities, as determined by the Authority; provided, however, that Facility Fees for Non-Signatory Airlines shall include a premium of no less than 20% above the Facility Fees charged to Signatory Airlines.

"***Federal Aviation Administration***" or "***FAA***" means the Federal Aviation Administration created under the Federal Aviation Act of 1958, as amended, or any successor agency thereto.

"***First Amendment Effective Date***" means June 16, 2021.

"***FIS Facilities***" means the Federal Inspection Services (FIS) facilities provided from time to time for the United States Customs Service, the United States Immigration and Naturalization Service, the United States Department of Health and Human Services and the United States Department of Agriculture, and any successor departments or services thereto, for the processing of arriving international passengers at the Airport.

"***FIS Fee***" means the per passenger fee charged to the Air Carriers using the FIS Facilities as defined and provided in Section 6.03(B)(11).

"***Fiscal Year***" means January 1 through December 31 of any calendar year, or such other fiscal year as the Authority may adopt for the Airport System, provided that such adoption has no material adverse effect on Airline.

"***Fit-Out Allowance***" shall have the meaning set forth in **Exhibit I**.

"***Fund Deposit Requirements***" means, for any Fiscal Year, the O&M Reserve Fund Requirement, the Airport System Capital Fund Deposit Requirement, the Renewal and Replacement Fund requirement (as defined and required in the Indenture), the Debt Service Reserve Fund requirement, the Equipment and Capital Outlay Fund Deposit Requirement and any other deposits to funds defined in this Agreement, held under the Indenture, or required under the Indenture for such Fiscal Year.

"*Gate*" means that portion of the Terminal consisting of a holdroom and all appurtenant space plus the associated Terminal ramp area and the associated Loading Bridge, if any.

"*Governmental Authority*" means any federal, Commonwealth, County, or other governmental entity, or any subdivision thereof, including the Authority, with authority over the Airport, Air Carriers or the Airline.

"***Handling Agreement***" has the meaning set forth in Section 2.04 of this Agreement.

"***Hazardous Materials***" shall mean and include any materials, substances, chemicals, or elements in any physical state (liquid, solid, gaseous/vapor) that are prohibited, limited, or regulated by the Environmental Laws, or any other substances, chemicals, materials, or elements that are defined as "hazardous" or "toxic," under the Environmental Laws.

"***Indemnified Party***" or "***Indemnified Parties***" means the Authority, its successors, and assigns, and each of its officers, officials, employees, agents, and volunteers.

"***Indenture***" means the trust indenture authorizing and providing for the issuance of revenue bonds and other indebtedness by the Authority secured by a pledge of revenues or net revenues of the Airport System, on either a senior or subordinate basis, as such indenture may be supplemented, amended, replaced, or restated from time to time.

"***Initial Term***" has the meaning set forth in Section 5.01.

"***Joint Use Premises***" means the areas in the Terminal leased to Airline prior to DBO for Airline's nonexclusive use, jointly with other Signatory Airlines similarly so designated, in which the Automated Baggage System is located, as shown and described in **Exhibit C-1**. Airline shall have the right to use the baggage claim areas jointly leased to it and other Signatory Airlines on a shared use basis with such other Signatory Airlines and Airline's obligations hereunder with respect to such premises, including its obligation to pay Terminal Rentals in accordance with Section 6.03(B)(5), shall also be shared with such other Signatory Airlines. For purposes of clarity, nothing in the preceding sentence shall be deemed to mean that Airline is jointly and severally liable hereunder with any other Signatory Airlines.

"***Landing Fee Rate***" means the Landing Fee Rate established pursuant to Section 6.02.

"***Landing Fees***" means the Landing Fees calculated pursuant to Section 6.02.

"***Leased Premises***" means, at any time, for each Signatory Airline, those areas and facilities in the Terminal Area which, pursuant to Article 3, are leased to such Signatory Airline as its Exclusive Use Premises, its Preferential Use Premises, its Joint Use Premises (if any), its Shared Use Premises, and its Common Use Baggage Premises.

"***Loading Bridges***" means loading bridges, pre-conditioned air, ground power/400Hz, potable water, fire bottles, and related equipment used to transport passengers between the Terminal and an aircraft and other devices, if any, to assist with passengers embarking onto and disembarking from aircraft.

"***Majority-in-Interest***" or ("***MII***") means such group of Signatory Airlines representing at least fifty percent (50%) in number, plus one additional Signatory Airline, and carrying greater than fifty percent (50%) of the total Enplaned Passengers reported by Signatory Airlines for the most recent six-month period for which information is available. In all cases, the Affiliates of Signatory Airlines shall not be deemed to be a separate Signatory Airline for purposes of determining the number of Signatory Airlines, but the Enplaned Passengers of Affiliates shall be added to and included as part of those of its sponsoring Signatory Airline. Solely for the purpose of determining a Majority-in-Interest, no Air Carrier shall be deemed to be a Signatory Airline so long as (i) any Event of Default with respect to such Signatory Airline has occurred and is continuing or (ii) the Signatory Airline is not conducting scheduled aircraft operations at the Airport at the time of the vote.

"***Maximum Gross Landed Weight***" means, for any aircraft operated by Airline or an Affiliate of Airline, the maximum landing weight of such aircraft as set forth in Airline's FAA-approved operating manual.

"***Non-Airline Revenues***" means, for any period, except to the extent hereinafter excluded, all "Revenues," as defined in the Indenture, excluding any transfers from the Coverage Account (or such other name) established by the Indenture; provided, however, the following shall not be included in Non-Airline Revenues but shall instead be allocated in accordance with the provisions of the Indenture and **Exhibit E**:

1. Airline Fees and Charges (other than Airline Fees and Charges which had been determined unpaid when due for purposes of inclusion in the calculation of Airline Fees and Charges pursuant to Section 6.04(C) and which are later collected, in whole or in part, by the Authority, together with any interest paid thereon pursuant to Section 6.04(B));

2. Other Authority Revenues;

3. the investment income on, and the income and gains realized upon the maturity or sale of, securities held in the Airport System Capital Fund; and

4. the investment income on, and the income and gains realized upon the maturity or sale of, securities held in any fund held under the Indenture at any time when the balance in such fund is below that required pursuant to the Indenture.

"***Non-Signatory Airline***" means any Air Carrier using the Airport that has not executed an agreement with the Authority substantially similar to this Agreement.

"***Operation and Maintenance Expenses***" or "***O&M Expenses***" means, for any period, the total expenses of the Authority for such period to operate, maintain, and administer the Airport System, as set forth in the Indenture, including, without limitation, the performance by the Authority of any of its obligations related thereto as set forth in this Agreement.

"***Operation and Maintenance Reserve Fund***" or "***O&M Reserve Fund***" means the fund created pursuant to the Indenture for the provision of financial reserves for the payment of O&M Expenses.

"***O&M Reserve Fund Requirement***" means the amount necessary to maintain a balance in the O&M Reserve Fund equal to two (2) months' of budgeted O&M Expenses for the current Fiscal Year or, if different, the amount required pursuant to the Indenture.

"***Other Authority Revenues***" all Revenues of the Authority that are not derived from the Airfield, Terminal, or AGC cost centers, including, but not limited to, gas drilling royalties, gas drilling bonus payments, donations from third parties, and funds allocated to the Authority for economic development purposes from the Commonwealth pursuant to the Pennsylvania Gaming

Economic Development and Tourism Fund (as the same may be amended from time to time), and includes interest or investment income on the related fund balances.

"***Passenger Facility Charges***" or "***PFCs***" means those charges authorized under 49 U.S.C. §40117, or any predecessor or successor law, and as approved by the FAA for collection by Air Carriers on behalf of the Authority from eligible enplaned passengers in accordance with a record of decision or final agency decision issued by the FAA, and interest, profits and other income derived from the investment thereof.

"***PIT Airport Affairs Committee***" means the committee of the same name consisting of representatives of the Signatory Airlines or any successor to its rights and duties hereunder.

"***Preferential Aircraft Parking Position***" means the Terminal ramp area that is a portion of Airline's Preferential Use Premises, or portion thereof, at the Airport for Airline's nonexclusive use for the parking of aircraft by Airline, to which Airline has priority over all other Air Carriers, subject to the terms and conditions of this Agreement.

"***Preferential Use Premises***" means those premises leased to Airline, including the ticketing and queueing area(s), sky cap, holdroom(s), airside operations area(s), and Preferential Aircraft Parking Positions shown on **Exhibit D**, and those portions of the Terminal in which Airline has a right to use with priority, but not exclusivity, over use by other Air Carriers pursuant to Article 3.01.

"***Prior Agreement***" has the meaning set forth in the Recitals of this Agreement.

"***Project***" means the Terminal Modernization Program ("***TMP***") at the Airport described in **Exhibit I**, as the same may be amended from time to time in accordance with the terms of this Agreement as provided in **Exhibit I**.

"***Revenue Aircraft Arrival***" means each arrival of an aircraft at the Airport, other than testing and training arrivals and an arrival of an aircraft which departs from the Airport and which returns for meteorological, mechanical, safety or any other emergency purpose.

"***Revenues***" means for any period all "Revenues" as defined in the Indenture, other than any transfers from the account or fund established under the Indenture to hold moneys and investments to meet the Coverage Requirement.

"***Rules and Regulations***" means the lawful rules and regulations governing the conduct at and operation of the Airport promulgated by the Authority from time to time pursuant to Section 12.01, as the same may be amended from time to time.

"***Scheduled Expiration Date***" means December 31, 2028, unless extended pursuant to Section 5.02 of this Agreement.

"***Security Deposit***" means a contract bond, irrevocable letter of credit or other security provided by a third party that is not a Signatory Airline acceptable to the Authority provided pursuant to Section 6.09.

"***Shared Use Premises***" means space in the Terminal appurtenant to the Exclusive Use Premises leased by Airline and used in common with one or more Air Carriers, as shown on **Exhibits C-1 and C-2** attached hereto, including, for example, shared hallways.

"***Signatory Airline***" means an Air Carrier that has entered into an agreement with the Authority substantially similar to this Agreement while such agreement remains in effect. In order to become a Signatory Airline, an Air Carrier must serve the Airport with scheduled passenger service and agree to lease at least five hundred square feet (500 sf of space in the Terminal at the Terminal Rental Rate for no less than the Initial Term of this Agreement.

"***Special Facility***" means a building or facility at the Airport, or an improvement to such building or facility, or portion thereof, constructed, installed, equipped, or acquired with: (i) the proceeds of the sale of obligations (other than Bonds) issued by the Authority pursuant to Section 9.05(A); (ii) other funds provided by the user or developer thereof or by any other person; or (iii) a combination of the foregoing items (i) and (ii).

"***Term***" has the meaning set forth in Section 5.02.

"***Terminal***" or "***Terminal Area***" means the passenger terminal buildings, including all landside and airside terminal facilities, and to the extent appurtenant to or necessary for the operation of such facilities, access roadways, tunnels, sidewalks, moving walkways, and people-mover systems, and all land, equipment, fixtures, appurtenances, and infrastructure associated with the Terminal, including the Terminal Ramp, terminal access roads, public parking facilities, and rental car facilities as described and depicted in **Exhibits B-1** and **B-2**, as such facilities may be modified in the future and as such may be designated from time to time by the Authority. For the sake of clarity, "Terminal" shall include the newly-constructed facilities resulting from the Terminal Modernization Program.

"***Terminal Ramp***" means the aircraft parking positions adjacent and appurtenant to the Terminal.

"***Terminal Rental Rate***" means the Terminal Rental Rate established pursuant to Section 6.03.

"***Terminal Rentals***" means the Terminal Rentals calculated pursuant to Section 6.03.

"***Transportation Security Administration***" or "***TSA***" means the Transportation Security Administration created under the Aviation and Transportation Security Act ("***ATSA***"), Public Law 107-71 of 2001, as amended, or any successor agency thereto.

"***Turn***" means an inbound and outbound flight operation, as specified by the Authority for determining Facility Fees, for which an Air Carrier uses Common Use Facilities.

Section 1.02 Interpretation.

A. References in the text of this Agreement to articles, sections, or exhibits pertain to articles, sections or exhibits of this Agreement and to the same articles, sections, and exhibits of each other Signatory Airline's Agreement, unless otherwise specified.

B. The terms "hereby," "herein," "hereof," "hereto," "hereunder," and any similar terms used in this Agreement refer to this Agreement.

C. Words importing persons shall include firms, associations, partnerships, limited liability companies, trusts, corporations, and other legal entities, including Governmental Authorities, as well as natural persons.

D. Any headings preceding the text of the articles and sections of this Agreement, and any table of contents or marginal notes appended to copies hereof, shall be solely for convenience of reference and shall not constitute a part of this Agreement, nor shall they affect its meaning, construction, or effect.

E. Words importing the singular shall include the plural and vice versa.

F. Where the approval of the Authority or the CEO is required under this Agreement, the written approval of the CEO or such person acting at the direction of the Authority's Board of Directors ("***Board***") in such position, or her or his duly authorized designee, shall be required to evidence such approval.

Section 1.03 Incorporation of Exhibits.

The following Exhibits are hereby made a part of this Agreement:

Exhibit A	Airport
Exhibit B-1	Cost Centers Prior to DBO
Exhibit B-2	Cost Centers After DBO
Exhibit C-1	Airline's Leased Premises Prior to DBO
Exhibit C-2	Airline's Leased Premises After DBO (revised per 1st Amendment)
Exhibit C-3	Common Areas After DBO (revised per 1st Amendment)
Exhibit D	Preferential Aircraft Parking Positions
Exhibit E	Calculation of Signatory Airline Fees and Charges
Exhibit F	Storm Water Best Management Practices
Exhibit G-1	Operation and Maintenance Responsibilities Prior to DBO
Exhibit G-2	Operation and Maintenance Responsibilities After DBO
Exhibit H	Federal Aviation Administration Required Provisions
Exhibit I	The Terminal Modernization Program
Exhibit I-1	Terminal Modernization Program Supplemental Package (revised per 1st Amendment)
Exhibit I-2	Terminal Modernization Program Scaled PDF Drawings (revised per 1st Amendment)
Exhibit I-3	Fit-Out Allowance
Exhibit I-4	Use of Project Contingency (added per 1st Amendment)
Exhibit J	NPDES Permit
Exhibit K	1994 Consent Order
Exhibit L	Reserved
Exhibit M	Facility Fee

ARTICLE 2
USES, RIGHTS AND PRIVILEGES

Section 2.01 Use of the Airport.

Subject to the terms of this Agreement, including but not limited to the restrictions contained in Section 2.03 and the requirements set forth in Section 2.05, and to the Rules and Regulations, Airline shall have the right to conduct its Air Transportation Business at the Airport; to use, in common with others so authorized, the common and public areas of the Airport (including the portion of the Airfield Cost Center described in clause (i) of the definition of Airfield and the public areas of the Terminal), in addition to Airline's Leased Premises; and to perform all operations and functions as are connected, incidental or necessary to Airline's Air Transportation Business at the Airport; including but not limited to the following rights:

A. To land, take off, fly over, taxi, tow, park, repair, maintain, service, test, deice, store, load, and unload Airline's aircraft and other equipment of Airline used in the operation of Airline's Air Transportation Business, including, but not limited to, the right to load and unload Airline's aircraft through the Loading Bridges at Airline's Leased Premises or, in accordance with Authority direction and subject to the rights of Airline under this Agreement, at Common Use Facilities or Airline's Preferential Aircraft Parking Positions or other assigned Terminal Ramp area as approved by the Authority; provided, however, that major maintenance of aircraft and routine servicing or maintenance of ground equipment on the Terminal Ramp is not permitted, unless specifically authorized by the Authority, and Airline shall not use the Terminal Ramp to load or unload all-cargo aircraft unless otherwise authorized in writing by the Authority.

B. To sell air transportation tickets and services; process passengers and their baggage for air travel; and to sell, handle, and provide mail, freight, cargo, and express services, and reasonable and customary airline activities.

C. Of ingress to and egress from the Airport including, without limitation, Airline's Leased Premises, and such right shall extend to Airline's Airline Parties and Airline's customers and invitees, and its or their equipment, vehicles, machinery and other property, subject to 49 CFR Part 1542, the Airport's airport security plan, Applicable Law and the Rules and Regulations relating to: (i) the general public, including passengers; (ii) access to non-public areas at the Airport by Airline Parties; or (iii) safety and security.

D. To train employees or prospective employees of Airline, other Air Carriers, and Governmental Authorities, and to test aircraft and other equipment being utilized at the Airport in areas designated or approved by the Authority; provided, however, such training and testing must be incidental to the use of the Airport in the operation by Airline of its Air Transportation Business and shall not unreasonably hamper or interfere with the use of the Airport and its facilities by others. The Authority may restrict or prohibit any such training and testing operations that it deems to interfere with the use of the Airport.

E. To sell, lease, transfer, dispose of, or exchange Airline's aircraft, engines, accessories, parts, gasoline, oil, grease, lubricants, fuel, propellants, and all other materials, equipment, supplies, and articles or goods used by, acquired in connection with, or incidental to

Airline's Air Transportation Business at the Airport; provided, however, that if Airline sells or seeks to sell goods to any entity (other than to Airline's parent or any Affiliate of Airline), Airline shall be required to obtain a license from the Authority to engage in such sales, which may include fees and taxes; and provided, further, Airline may not, and shall cause its agents not to, sell or permit to be sold, aviation fuels or propellants except (i) to any Air Carrier that is a successor company to Airline; (ii) for use in aircraft of others that are being used solely in the operation of Airline's Air Transportation Business, including, but not limited to, such Airline's Affiliates; (iii) when a comparable grade and type of fuel desired by others is not available at the Airport except from Airline; or (iv) in accordance with sales of fuel through the Airport's fuel hydrant system, to the extent the Authority has authorized by an agreement one or more Air Carriers or an entity owned or controlled by one or more Air Carriers to operate the fuel flowage, storage, and distribution system at the Airport.

F. To purchase or otherwise obtain services and personal property of any nature, including, but not limited to, aircraft, engines, accessories, parts, gasoline, oil, grease, lubricants, fuel, propellants, food, beverages, including food and beverages for consumption aloft, passenger supplies and all other materials, equipment, supplies, and articles or goods used by, acquired in connection with, or incidental to, Airline's Air Transportation Business at the Airport, from any person it may choose, wherever such person may be located, subject to the Rules and Regulations; and subject to the Authority's right to require that each provider of services and/or supplies secures a permit from the Authority to conduct such activity at the Airport, pays required fees, and abides by the Rules and Regulations.

G. Subject to the prior approval of the CEO and the Federal Communications Commission and subject to the Authority Tenant Request Process, to install, maintain, and operate, alone or in conjunction with any other Air Carrier, or through a nominee, such radio (including radio frequency identification ("***RFID***") devices and beacons), communications, flight information display systems, meteorological and aerial navigation equipment, and associated wiring, as may be necessary or convenient for Airline's Air Transportation Business at the Airport, in or on Airline's Leased Premises, and at other locations at the Airport; provided, however, that Airline shall provide to the Authority, if requested, electronic flight arrival and departure information through Airline systems and shall cooperate with the Authority's installation of centralized and remote flight information displays; and provided, further, that if the spectrum frequencies of such devices interfere with those of the Authority, other Air Carriers or other parties operating at the Airport, the CEO shall have the sole right to allocate the use of such frequencies in her or his sole discretion; and provided, further, that (i) such installations and the subsequent use of such equipment shall be subject to Applicable Law and the Rules and Regulations; and (ii) the location of all such equipment and facilities shall be determined by the Authority in its exclusive but reasonable discretion taking into account the operations of all Air Carriers at the Airport. Subject to the Rules and Regulations, Airline may install in the holdroom of any Preferential Use Premises and, with the Authority's consent, Airline's Gate Information Display System (GIDS). The Authority shall have unrestricted access to all communication equipment owned or used by an Airline and located on its Leased Premises if any of the Authority equipment or systems interface with such equipment. Prior to any such installation, Airline shall provide the Authority with all necessary supporting documentation related to such installations. All Air Carriers are required to use the Authority's compatible multi-user flight information display systems.

H. To use water, sewer, electric power, telephone, data, preconditioned air systems, and other utilities supplied by the Authority from time to time at or adjacent to Airline's Leased Premises.

I. To use the areas designated as passenger Air Carrier employee parking facilities for the parking of its employees' vehicles pursuant to an operating agreement, lease, or other arrangement containing such reasonable terms and conditions as the Authority and Airline shall mutually agree upon and the payment of any reasonable fees required pursuant to such arrangement.

J. To purchase, keep, and install, and in any event to use and maintain, at the areas designated by the Authority as Airline's ground service equipment ("***GSE***") parking facilities (which may include Airline's Preferential Aircraft Parking Positions), mobile devices for the loading, unloading and general servicing of Airline's aircraft, air start systems, and other miscellaneous aircraft and aircraft-related support equipment, pursuant to an operating agreement, lease, or other arrangement containing such reasonable terms and conditions as the Authority and Airline shall mutually agree upon and the payment of any reasonable fees required pursuant to such arrangement.

K. To use the Airport fuel system for the purpose of storing and dispensing fuel contingent upon entering into a fuel system lease with the Authority or an agreement with a consortium that operates the Airport fuel system containing such reasonable terms and conditions as the Authority or such consortium and Airline shall mutually agree upon. Fuel tanker trucks are prohibited from receiving fuel (refilling) from the fuel hydrant system.

L. Subject to the Authority's design standards for the Airport as the same may from time to time be adopted, amended, or altered, to install, maintain and use signs in Airline's Leased Premises, including installation of Airline's logo on the walls behind ticket counters and check-in counters in holdrooms at Airline's Preferential Use Premises. Notwithstanding the foregoing, in Airline's Exclusive Use Premises not visible from public or common areas, Airline shall be permitted, without the need to obtain the Authority's consent, to install such signs as it desires so long as Airline complies with Applicable Law, the Rules and Regulations and the Authority's design standards for the Airport, as in effect from time to time.

M. To operate and maintain in Airline's Exclusive Leased Premises, passenger clubs and lounges; provided, however, that if Airline shall engage in the sale of goods or services or charge an entrance fee at such club or lounge, Airline shall pay to the Authority, in addition to all other fees and charges payable hereunder, a concession fee equal to the amount of gross sales at such club or lounge multiplied by the rate equivalent to the highest concession fee rate (including any incremental percentage fees) being paid to the Authority or its third party concession manager by any concessionaire for similar sales at the Airport.

N. To install, maintain and operate, in Airline's Leased Premises only in areas not accessible to the general public, vending machines dispensing food and beverages and other merchandise for consumption by Airline's employees; provided, however, that if such machines or equipment require electrical power not serving the Leased Premises on the Commencement

Date, Airline shall be responsible for any electrical upgrades necessary to service such machines or equipment.

O. To install, maintain, and operate, in Airline's Leased Premises, customer relations, security, waiting room, baggage, cargo, mail handling, and storage facilities and equipment; reservations, administrative, and operations offices; and lockers, restrooms and related facilities for its employees; provided, however, that if such machines, equipment, or facilities require electrical power not serving the Leased Premises on the Commencement Date, Airline shall be responsible for any electrical upgrades necessary to service such machines, equipment, or facilities.

P. To provide, either alone or in conjunction with others, or through a nominee, porter/sky cap service for the convenience of the public.

Q. The Air Carriers operating at the Airport may form a terminal consortium to procure and/or operate airport services, equipment and systems on terms and conditions mutually agreed by the Authority and the Air Carriers; provided, however, that the allocation of the costs of such consortium among the Air Carriers shall be acceptable to the Authority and shall be reasonable and not unjustly discriminatory.

Section 2.02 Exercise of Rights by and for Third Parties.

A. Only in accordance with Section 2.04 and Section 16.01 with respect to Handling Agreements, and subject to the provisions of Section 2.02(B), the rights and privileges granted to Airline pursuant to this Article 2 may be exercised on behalf of Airline by other Air Carriers or Ground Handlers, and Airline may exercise on behalf of any other Air Carrier providing air transportation to and from the Airport, any of the rights granted Airline herein.

B. If at any time, the CEO shall reasonably determine that the Air Carriers or Ground Handlers exercising the rights and privileges granted to Airline pursuant to this Article 2 are exercising such rights and privileges (i) in a manner which interferes with the operation or maintenance of the Airport; (ii) which adversely affects the health or safety of the public or other users of the Airport; or (iii) which fails to comply with the Rules and Regulations or terms of this Agreement, the CEO shall notify Airline of such determination which notice shall include such information as may be necessary for Airline to verify such determination. Airline shall promptly commence and diligently pursue action necessary to correct the conditions or actions specified in such notice. If such conditions or actions are not corrected within thirty (30) calendar days (or immediately, if the Authority determines that such conditions or actions adversely affect health or safety) after receipt of such notice or if such conditions or actions cannot be corrected within such period and Airline has not promptly commenced and diligently pursued all such corrective action which could be taken within such period, then upon the request of the CEO, Airline shall terminate its arrangement or agreement with such Air Carrier or Ground Handler.

Section 2.03 Restrictions.

A. The grant of such rights and privileges hereunder does not authorize Airline to conduct a separate business at the Airport, but permits Airline to conduct such activities only insofar as they are reasonably necessary or incidental to or connected with the conduct of

Airline's Air Transportation Business at the Airport and to the conduct of Handling Agreements approved pursuant to Section 2.04.

B. All of Airline's passenger terminal facilities and amenities related thereto must be located within the Terminal unless approved by CEO; provided, however, that ancillary ticketing of passengers and handling of their baggage may be conducted by Airline at remote locations at the Airport where such activities are incidental to Airline's servicing of such passengers at the Terminal with the prior written approval of the CEO.

C. Except as to rights specifically granted in Section 2.01, nothing contained herein is intended or shall be construed to authorize or permit Airline to compete with any of the Authority's authorized concessionaires, Airport parking facilities, or rental car companies operating at the Airport.

D. The CEO may, from time to time, temporarily or permanently close roadways, taxiways, taxi lanes, runways, apron areas, doorways and any other area at the Airport as necessary to maintain, improve, construct, or repair such facilities; provided, however, that, unless an emergency situation exists, the Authority shall use diligent efforts to minimize and schedule closings in order to minimize the disruption of services being provided and operations of Airline, and it shall use commercially reasonable efforts to provide alternative means of ingress and egress and other facilities necessary for Airline's operations.

E. The Authority has the right to act as the exclusive provider of telecommunications and data networking infrastructure at the Airport; provided, however, that Airline may provide and install its proprietary security equipment as long as such equipment does not interfere with the use of such telecommunications and data networking infrastructure by others at the Airport.

F. The Authority has the right to restrict the use by Airline of Terminal ramp area space not leased to Airline for aircraft parking or otherwise. The Authority has the right to charge a reasonable fee for aircraft parking on such unleased Terminal ramp area.

G. The Authority may require the execution of a separate agreement between the Authority and Airline for the lease and use of space and/or ground area outside the Airline's Leased Premises.

H. Airline may not conduct or permit the sale or other distribution of food or beverages to passengers in the Terminal, except as expressly provided in this Agreement, without the approval of the CEO; provided, however, that in the event of irregular operations causing flight delays, Airline may provide snacks and nonalcoholic beverages to its customers without cost; provided, however, that if such privilege is abused, in the sole judgment of the CEO, such privilege may be withdrawn.

I. Airline shall not knowingly interfere or permit interference by its Airline Parties, customers or invitees with the use, operation, or maintenance of the Airport, including but not limited to, the effectiveness or accessibility of the drainage, sewage, water, communications, fire protection, utility, electrical, or other systems installed or located from time to time at the Airport; and Airline shall not engage in any activity prohibited by the Authority's noise abatement procedures.

J. As soon as reasonably possible after Airline's disabled aircraft is released from the control or jurisdiction of all applicable Governmental Authorities, Airline shall remove (or cause the lessor of an aircraft to remove) any such disabled aircraft from the Airfield and Terminal Ramp, and shall place and store any such disabled aircraft only in such storage areas and upon terms and conditions as may be reasonably approved by the Authority. In the event a disabled aircraft is not removed as expeditiously as is reasonably possible, the Authority may, following reasonable notice to Airline, but shall not be obligated to, cause the removal of such disabled aircraft. In such case, the Airline shall pay to the Authority, upon receipt of an invoice therefor, the costs incurred for such removal plus ten percent (10%).

K. [Reserved].

L. Parking or storage of aircraft or GSE at an aircraft apron that in any way interferes with Airport operations, including the movement of passengers, cargo, or other aircraft, is prohibited. Airline must remove aircraft or GSE within forty-five (45) minutes of notification by the Authority of its determination that: (i) an emergency exists requiring removal of said aircraft or ground support equipment; (ii) said aircraft or ground support equipment is interfering with Airport operations or the movement of passengers, cargo, or other aircraft; or (iii) the aircraft apron is required for temporary access by another Air Carrier, provided that the Authority has first determined that other suitable aircraft apron space is not available. Airline may park and store GSE owned by Airline, its Affiliate(s), or any subcontractor to Airline which holds a valid operating permit from the Authority and with whom Airline contracts to provide airside services. Airline acknowledges the need for vehicular access to the Terminal. Tenants of Terminal space shall have the non-exclusive right to park vehicles immediately adjacent to their leased premises on Preferential Aircraft Parking Positions so long as they do not impact aircraft uses.

M. All rights not otherwise expressly granted to Airline pursuant to Section 2.01 are hereby reserved to the Authority.

Section 2.04 Handling Agreements.

A. Subject to the terms and provisions set forth in Section 16.01(A), and for so long as Airline conducts an Air Transportation Business at the Airport, subject to the Authority's prior written approval, which may be granted or withheld in the Authority's sole discretion, Airline may enter into one or more agreements (each a "***Handling Agreement***") to use all public areas of the Airport which Airline has a right to use in common with others for the handling by Airline's personnel of the Air Transportation Business of any other Air Carrier using the Airport to the same extent as they may be used for the Air Transportation Business of Airline, or handling by the personnel of any third party service provider (a "***Ground Handler***") holding a valid permit or other agreement with or issued by the Authority to provide the services requested by Airline; provided, however, that Airline shall remain liable for all of its and the handled Air Carrier's obligations under this Section 2.04.

B. In the event Airline has been approved to handle any other Air Carrier and such Air Carrier is neither (i) an Affiliate of the Airline; or (ii) another Signatory Airline, Airline must collect, on behalf of the Authority, and submit to Authority, all applicable rents, fees, and charges as determined by the Authority and, as consideration for the privilege of being allowed to handle such Air Carrier, Airline will pay to the Authority a monthly privilege fee established by the Authority from time to time.

C. In the event a Ground Handler has been approved to handle an Air Carrier and such Air Carrier is a Signatory Airline, or an Affiliate of a Signatory Airline, Ground Handler is not required to collect, on behalf of the Authority, and submit to Authority, a monthly privilege fee established by the Authority from time to time.

Section 2.05 Airline Requirements.

A. Airline shall obtain and hold all certificates, permits, licenses, insurance, or other entitlements required by Applicable Law in order to enable it to conduct its operations and engage in the Air Transportation Business at the Airport, and said certificates, permits, licenses, or other entitlements shall be kept current, valid, and complete throughout the duration of Airline's operations at the Airport.

B. Except as otherwise provided herein or in the Rules and Regulations, Airline shall have the right to obtain supplies or services from suppliers, vendors, or contractors of its own choice for its operations at the Airport; provided that the Authority may license and regulate all persons or companies doing business at the Airport and impose reasonable charges for the privilege of conducting any such business and prohibit persons from engaging in aeronautical activities, the provision of ground transportation services, or any commercial activities at the Airport, except in accordance with agreements, concession contracts, permits, or operating agreements entered into between the Authority and such persons.

C. Airline shall comply with Applicable Law and the Rules and Regulations relating to Airport security and shall control its Leased Premises, including Airline's use of its Common Use Premises, so as to prevent or deter unauthorized persons from obtaining access to the air operations area or any other secure area of the Airport. Airline shall also take such security precautions, with respect to its Leased Premises and Airline's operations and service personnel related thereto, as the Authority may, from time to time, reasonably require pursuant to the Rules and Regulations. Airline shall reimburse the Authority for all fines or charges imposed by any applicable Governmental Authority against the Authority as a result of Airline's violation of any Applicable Law or the Rules and Regulations.

D. Airline acknowledges that a portion of its Leased Premises is to be used by the traveling public. Airline shall make available such space to its passengers and to the traveling public on a nondiscriminatory basis, including ensuring accessible paths of travel for disabled persons as and to the extent within Airline's control and required under Applicable Law, and shall make reasonable efforts to coordinate its activities and operations with abutting tenants and the Authority, so as to maximize efficient use of available space.

E. Airline may not injure, deface, or otherwise harm its Leased Premises in any manner that will constitute waste, and shall not cause or permit any unlawful conduct, unreasonable annoyance, or nuisance to exist on the Leased Premises, nor permit any activity or omission which constitutes or results in unlawful conduct, unreasonable annoyance, or nuisance, nor permit the emission of any objectionable noise, vibration, or odor, nor overload the floor of the Leased Premises, nor permit any use of the Leased Premises which will invalidate or increase the premiums on any of the Authority's insurance; provided that the conduct of Airline's Air Transportation Business in accordance with Applicable Law and the Rules and Regulations shall not be deemed a nuisance or an unreasonable annoyance.

F. Airline shall participate in any lawful Airport-wide programs or initiatives of general applicability as the Authority may require upon notice to Airline, provided such program or initiative shall not result in any material cost or expense or result in any undue burden to Airline.

ARTICLE 3
LEASE OF PREMISES; ASSIGNMENT OF AIRCRAFT PARKING POSITIONS

Section 3.01 Premises in the Terminal.

A. The Authority hereby leases to Airline from the Commencement Date until DBO, the areas in the Terminal as described and shown in **Exhibit C-1**, including the following: (i) for Airline's exclusive use, the Exclusive Use Premises in the Terminal; (ii) for Airline's preferential use, the Preferential Use Premises in the Terminal; and (iii) for Airline's joint use, the Joint Use Premises and Shared Use Premises in the Terminal. Airline shall have priority in using the Preferential Use Premises, subject to the provisions of this Agreement. The Exclusive Use Premises, Preferential Use Premises, Joint Use Premises and Shared Use Premises described in this Section may be modified from time to time by mutual agreement of the Authority and Airline. **Exhibit C-1** shall be amended to reflect such modifications.

B. **Exhibit I-2** describes space by category of space in the Terminal after DBO estimated as of November 1, 2019 on the basis of preliminary TMP plans. **Exhibit C-2** sets forth Airline's indicative Leased Premises in the Terminal after DBO by category of space estimated as of November 1, 2019; provided, however, that Airline may designate by written notice to the Authority delivered at least one year before DBO up to ten percent (10%) of the space designated as Airline's Leased Premises in **Exhibit C-2** and being constructed as part of the TMP for deletion from Airline's Leased Premises at DBO. Subject to the foregoing sentence, Authority hereby leases to Airline, on and subsequent to DBO as described and shown on **Exhibit C-2** (as it may be modified in accordance with Section 3.02), the following: (i) for Airline's exclusive use, the Exclusive Use Premises in the Terminal; (ii) for Airline's preferential use, the Preferential Use Premises in the Terminal; (iii) for Airline's Shared Use, the Shared Use Premises; and (iv) for Airline's common use in common with other Air Carriers operating at the Airport, the Common Use Baggage Premises in the Terminal. Such space may be adjusted pursuant to Section 3.02. Airline shall have priority in using the Preferential Use Premises, subject to the provisions of this Agreement. The Exclusive Use Premises, Shared Use Premises, Preferential Use Premises, and Common Use Baggage Premises described in this Section may be modified from time to time pursuant to Section 3.02 or by mutual agreement of the Authority and Airline subject to Section 3.03. **Exhibit C-2** shall be amended to reflect such modifications.

C. The Authority hereby leases to Airline, for Airline's preferential use the area on the Terminal Ramp described on **Exhibit D** as Airline's Preferential Aircraft Parking Positions.

Airline shall have priority in using such premises in accordance with the provisions of this Agreement.

Section 3.02 Adjustment of Dimensions After DBO.

A. The dimensions of the areas to be occupied by Airline subsequent to DBO shown in **Exhibits C-2** and **C-3**, as the same may be amended approximately one year prior to DBO, are approximate only. Upon completion of construction of these areas, actual measurements of the Leased Premises in the form of As-Built Drawings shall be provided by Authority. The As-Built Drawings shall incorporate all of Airline's Leased Premises, including airside space, apron space and new space constructed as part of the Project. When such Leased Premises consist of enclosed space, the As-Built Drawings shall be used to calculate the interior space from the center line of interior walls to the inside face of exterior walls. For the avoidance of doubt, any amendments to the dimensions shall be those that customarily arise from as-built drawings and not resulting from material changes to the Leased Premises.

B. Actual square footage of Airline's Leased Premises shall be incorporated in a replacement **Exhibit C-2** to be prepared approximately one year prior to DBO, when Airline submits its final specifications for its Airline Office Space pursuant to **Exhibit I**, and as soon as possible after DBO when the As-Built Drawings are completed, and shall be the basis for determining the amount of Terminal Rentals payable pursuant to this Agreement; provided, however, that until the As-Built Drawings are available, Airline's Terminal Rentals shall be based on the approximations in **Exhibit C-2**, as such exhibit may have been amended from time to time prior to DBO. Subsequent to the receipt of the As-Built Drawings, the Airline Fees and Charges previously paid by Airline shall be retroactively adjusted to reflect the actual amount of Airline Fees and Charges which should have been paid by Airline if Airline Fees and Charges had been calculated on DBO using the As-Built Drawings to identify and calculate the square footage leased to Airline. Any amounts due from Airline to Authority pursuant to this Section 3.02 shall be paid with Airline's next payment of Terminal Rentals and any amounts due from Authority to Airline pursuant to this Section 3.02 shall be credited to Airline or paid to Airline within thirty (30) days after such retroactive adjustment.

Section 3.03 Addition and Deletion of Space, Rights, Licenses or Privileges.

The Authority and Airline may, from time to time, by mutual agreement, add additional space or spaces to or delete space or spaces from the various Leased Premises of Airline or may, subject to Section 17.13, add rights, licenses or privileges, or delete rights, licenses, or privileges, granted to Airline hereunder, or any two Air Carriers may exchange space in the following manner: Airline shall submit to the CEO a written request for the addition or deletion of rights, licenses, privileges, or space, which shall describe with particularity (i) the rights, licenses, privileges, or space which Airline wishes to add or delete; (ii) the Terminal Rentals, if applicable; and (iii) the date on which Airline wishes such addition or deletion to be effective. If the CEO approves such addition or deletion in her or his reasonable discretion, she or he shall so notify Airline in writing, and the addition or deletion shall be effective on the date specified in the CEO's written approval. **Exhibit C-1** or **Exhibit C-2**, as applicable, shall be revised accordingly to reflect an addition or deletion; provided, however, that the CEO shall have the right to withhold approval of the deletion of any space from any Signatory Airline's Leased

Premises unless and until another Air Carrier has consented to lease such space on substantially the same terms and conditions as such Signatory Airline; and, provided, further, that Airline shall not remain obligated with respect to payment of Airline Fees and Charges with respect to such deleted space (including in case of such deletion of space resulting from a relocation of Airline pursuant to Sections 4.04, 4.05, or 13.01). All space added to the Leased Premises or rights, licenses, or privileges added pursuant to this Section 3.03 shall be subject to all the terms, conditions, and other provisions of this Agreement and Airline shall pay to the Authority all sums, fees, and charges applicable to such additional space, rights, licenses, or privileges in accordance with the provisions of this Agreement.

Section 3.04 Americans with Disabilities Act and Air Carrier Access Act.

A. Airline shall be solely and fully responsible for ensuring that Airline's operations, wherever they may occur at the Airport, and any improvements made by Airline pursuant to Section 11.02, shall comply with the applicable provisions of the Americans with Disabilities Act, 42 U.S.C. §§12101, *et seq*., as amended from time to time ("***ADA***"), and the Air Carrier Access Act, 49 U.S.C. §41705, as amended from time to time ("***Access Act***"), including the regulations promulgated under the ADA and the Access Act and the Rules and Regulations. If found to be in violation of or non-compliance with the ADA or the Access Act by a Governmental Authority with jurisdiction, Airline shall develop a work plan to correct any violations or non-compliance with the ADA or the Access Act. Airline shall deliver to the Authority, upon Authority's request, a copy of each such report and work plan. Authority's approval of or acceptance of any aspect of Airline's activities under this Agreement shall not be deemed or construed in any way as a representation that such item, activity, or practice complies with the ADA or the Access Act. Airline agrees to indemnify, defend, and hold the Authority harmless from any and all costs incurred by Authority with respect to Airline's failure to comply with the ADA or the Access Act for Airline's operations or any improvements made by Airline at the Airport.

B. Airline shall comply, at its own expense, with all Applicable Laws and Rules and Regulations concerning the general area of civil rights, minorities, and accessibility, and the topics dealt with in subparagraph (A) above now in force or hereafter prescribed or promulgated by any Governmental Authority, whether foreseen or unforeseen or ordinary or extraordinary.

Section 3.05 Signage Release.

Airline hereby grants to the Authority a revocable, non-exclusive license and authorizes the Authority to display the Airline's name, logo, and service marks without any modification, solely in connection with the operation of the Airport, including electronic display screens (i) installed at the Airport as part of the Authority's Multi-Use Flight Information Display System; or (ii) installed at any remote facility which receives an electronic, telephonic, or other type of input or feed from the Authority. This authorization shall continue as long as Airline operates at the Airport until revoked in writing by the Airline, plus a reasonable time period to remove Airline's name, logo, and service marks. The Airline will indemnify and hold harmless the Authority from any loss, damage, cost, or expense (including reasonable attorneys' fees) arising out of or resulting from any claims during or after the term of this Agreement as a result of any such authorized use of the displays, including but not limited to claims for trademark or service mark infringements. Subject to the foregoing license, Airline's name, logos, and service marks shall remain the property of the Airline. The Authority acknowledges that it has no interest in the Airline's name, logo, and service marks except as provided herein and will not take any action or fail to take any action which could impair the Airline's rights in the same.

ARTICLE 4
AIRPORT ACCESS AND AIRLINE ACCOMMODATION

Section 4.01 Policy of Open Access.

The Authority intends to maintain a policy of providing open access to the Airport and achieving balanced utilization of Airport facilities. To achieve that goal, the Authority shall maintain a minimum number of Gates within the Common Use Facilities, and the Authority reserves the right to require sharing and temporary use of Airline's Leased Premises and Preferential Aircraft Parking Positions in accordance with this Article 4. Common Use Facilities shall be assigned by the Authority in accordance with its gate scheduling protocols, as they may be amended from time to time by the Authority. Any facilities and aircraft parking positions preferentially leased and assigned to Signatory Airlines shall be utilized in accordance with Section 4.03. Subject to this Article 4, Airline shall have scheduling priority over other users for its Preferential Use Premises.

Section 4.02 Accommodation Through Use of Common Use Facilities.

The Authority shall retain under its exclusive control and possession the Common Use Facilities. Common Use Facilities shall be assigned by the Authority in accordance with its gate scheduling protocols, as they may be amended from time to time by the Authority.

Section 4.03 Accommodation at Preferential Use Premises.

A. If an Air Carrier, including any Air Carrier seeking to expand its service or an Air Carrier seeking entry into the Airport ("***Requesting Air Carrier***"), is in need of space or facilities at the Airport which cannot be met by use of then unleased premises in proximate location to its existing Leased Premises, if any, the Authority shall direct Requesting Air Carrier to request the use of space or facilities of Signatory Airlines on a voluntary basis. The Signatory Airlines shall make reasonable efforts to accommodate such requests in a timely manner.

B. In the event that (i) the CEO receives a written request from a Requesting Air Carrier requesting space or facilities of a type leased to Signatory Airlines as Preferential Use Premises; (ii) the Requesting Air Carrier demonstrates to the CEO that it has contacted all Signatory Airlines at a corporate level above that of the local station management, and has exhausted all reasonable efforts to find reasonable accommodation for its proposed operations and the space or facilities it needs; and (iii) the CEO determines that such Requesting Air Carrier needs the requested space or facilities to accommodate passengers or aircraft, then, subject to the provisions below, the CEO may grant such Requesting Air Carrier the right of temporary or shared use of all or a designated portion of Airline's Preferential Use Premises, including the use of related Loading Bridges as may be required.

C. If a Requesting Air Carrier only requires use of space or facilities on a temporary basis or for limited service, the CEO may, in accordance with this Article 4, assign to an Air Carrier the right to use or occupy a portion of Airline's Preferential Use Premises, but only if such Preferential Use Premises is not scheduled for use by Airline.

D. In the event the CEO determines that a Requesting Air Carrier's needs require granting such Requesting Air Carrier the right to share the Preferential Use Premises of one or more Signatory Airlines other than as provided in subparagraph (C) above, the CEO shall serve written notice to all Signatory Airlines of that determination and notice of the Authority's intention to make a further determination, in not less than fifteen (15) calendar days, as to how the Requesting Air Carrier will be accommodated. In the event the CEO makes a determination that a Requesting Air Carrier shall have the right to share the Preferential Use Premises of one or more Signatory Airlines, the CEO shall serve written notice to such Signatory Airlines of that determination no less than forty-five (45) calendar days prior to the implementation of such shared usage.

E. In accordance with the conditions set forth in subparagraph (F) below, the CEO may grant the Requesting Air Carrier the right of shared or temporary use of all or a designated portion of the Airline's Preferential Use Premises, as well as rights of ingress and egress, the right to use the Preferential Aircraft Parking Positions that are a part thereof, and the right to use related Loading Bridges and other appurtenant equipment which are necessary for the effective use of such premises, provided that:

1. Requesting Air Carrier provides Airline and Authority with indemnification and proof of insurance reasonably satisfactory to Airline and Authority; provided, however, that Airline may not require any indemnification or insurance more favorable to it than that which it provides to the Authority hereunder, unless otherwise agreed to by the CEO.

2. Requesting Air Carrier agrees to pay to the Authority a Facility Fee for each such use of such premises.

3. Requesting Air Carrier enters into a written agreement with Airline therefor, which agreement shall be submitted to the CEO for written approval prior to the effective date thereof.

4. Airline shall not be required, pursuant to the terms and conditions of this Section 4.03, to lease or otherwise authorize the use of Airline's equipment or other personal property at the Airport or make any modifications to its Leased Premises.

Airline agrees to make reasonable efforts to facilitate the temporary or shared accommodation of the Requesting Air Carrier's scheduled operations, including the use of assigned passenger Loading Bridges and other portions of the Preferential Use Premises as may be reasonably necessary to accommodate the Requesting Air Carrier. In the event that the Requesting Air Carrier and Airline are not able to agree to a form of written agreement pursuant to (3) above after reasonable efforts by both parties, the CEO shall have the right, after consultation with both parties, to set the final terms of such written agreement, which shall provide no less protection of Airline's interests than Airline provides for the Authority, and be binding on both the Requesting Air Carrier and Airline.

F. In the event that, pursuant to subparagraphs (B) or (C), above, the CEO determines that a Requesting Air Carrier is in need of facilities to accommodate passengers or aircraft, the CEO will consider the following factors in designating the specific Preferential Use Premises for temporary or shared use by the Requesting Air Carrier:

1. the average number of flight arrivals and departures per aircraft parking position per day;

2. flight scheduling considerations;

3. potential labor conflicts;

4. aircraft parking position locations; and

5. other operational considerations.

In the event Airline is required to share its Preferential Use Premises, Airline shall be given priority in all aspects of usage of such shared Premises, including for any schedule changes or irregular operations, over all other Air Carriers, including the Requesting Air Carrier.

G. Notwithstanding the foregoing, the Authority may, by adoption of Rules and Regulations, establish priorities for use of Preferential Use Premises during periods of irregular operations as long as such irregular operations do not unreasonably interfere with Airline's operations at the Preferential Use Premises, including the Airline's irregular short-term use, provided the Airline gives adequate notice to the Authority.

Section 4.04 Reassignment of Leased Premises.

A. Authority's Right to Reassign Leased Premises. The Authority may reassign to another Air Carrier one or more of Airline's Gates and Related Terminal Area assigned as Leased Premises if: (i) Airline's Gate Utilization (as defined below) for such preferentially assigned Gate(s) over the most recent one hundred eighty (180) day period is less than the Utilization Threshold (as defined below); (ii) the CEO determines that there is a reasonable need for the preferential use of such Gate(s) by another Air Carrier; and (iii) such other Air Carrier meets or exceeds the required Utilization Threshold through its current or proposed schedule. Upon such determination, the CEO will provide Airline with a notice ("***Initial Recapture Notice***") of the Authority's intent to recapture such Gate(s). Prior to such reassignment becoming effective, Airline shall have a ninety (90) calendar day period after the date of the Initial Recapture Notice to adjust its schedule to equal or exceed the Utilization Threshold so as not to be subject to such reassignment. If Airline does not meet or exceed the Utilization Threshold within one hundred eighty (180) days after the date of the Initial Recapture Notice, and Airline does not maintain such service that meets or exceeds the Utilization Threshold for one hundred eighty (180) days thereafter, the CEO will send Airline a notice (the "***Final Recapture Notice***") terminating Airline's lease of the portion of the Leased Premises subject to reassignment as of the date specified in the Final Recapture Notice. When determining specific Leased Premises subject to reassignment, the Authority will use reasonable efforts to not reassign facilities that will disrupt the continuity and staffing of Airline's operations. The number of Gates within the Leased Premises subject to reassignment by the Authority will be the lesser of: (x) the requirement of the requesting Air Carrier, and (y) the difference between the number of Gates then leased to such Signatory Airline and the number of Gates which would have caused such Airline's Gate Utilization for the Leased Premises, measured for the last one hundred twenty (120) days prior to the delivery of the Final Recapture Notice, to exceed one hundred percent (100%) of the Airport Utilization Threshold for such period.

Any reassigned portion of the Leased Premises will consist of the applicable Gate(s) and any Related Terminal Area. In the case of the reassignment of less than all of the Gates within the Leased Premises, the Authority shall designate which Gate(s) shall be subject to such reassignment after consulting with Airline. Promptly after the reassignment, Airline will submit a revised airport parking plan to reflect such reassignment, which plan will be in form and substance reasonably acceptable to the Authority. Unless the CEO determines, in her or his sole discretion, that reassignment of such Leased Premises is necessary for the proper functioning of the Airport, in which case the cost of relocating the Airline shall be a cost of the Authority recovered from all Signatory Airlines as part of Terminal Rentals, the Signatory Airline(s) that will occupy such reassigned Gate(s) and Related Terminal Area shall pay the costs of relocating the Signatory Airline whose Gate(s) are so reassigned.

The Authority and Airline acknowledge and agree that due to the reduction in passengers traveling to and from the Airport due to the COVID-19 pandemic, many Signatory Airlines are not meeting the Utilization Threshold for Gate use set forth in Section 4.04(B). In order to avoid disruption in Airline's operations during the period that passenger traffic at the Airport remains depressed due to the effects of the COVID-19 pandemic, the Authority agrees to waive the Authority's right to reassign any of Airline's Gates and Related Terminal Area pursuant to Section 4.04 for the period commencing on the First Amendment Effective Date and ending on the first day of the month following the month that total Enplaned Passengers at the Airport are greater than or equal to eighty-five percent (85%) of the Enplaned Passengers for the same month in calendar year 2019.

B. Definitions. For the purposes of this Section 4.04, the following terms shall have the following meanings:

The "***Utilization Threshold***" shall be an average of four (4) arrivals and four (4) departures (i.e., four Turns) per Gate per day; provided, however, that, after consultation with the Signatory Airlines, the Authority may adjust such Utilization Threshold at DBO to reflect then-current operations at the Airport.

"***Airline's Gate Utilization***" shall be the average of Airline's and its Affiliates' daily Turns per Gate (taking into account all Gates located at the Leased Premises other than any Gates subleased to another Air Carrier) and shall include Airline's flights and flights of any Affiliate operating at the Leased Premises on behalf of Airline, but shall not include any operations by subtenants or operations by Air Carriers pursuant to Handling Agreements (other than those of Affiliates operating at the Leased Premises).

The "***Related Terminal Area***" shall mean that portion of the Leased Premises reasonably necessary to conduct airline operations at the Gate and shall include, without limitation, upper level and lower level Terminal access for persons, Loading Bridges, passenger hold rooms, gate check-in counters, a portion of the Common Use Baggage Premises, ticket counters, queuing space, operations space, airport ticket office facilities, and rights of access to terminal passenger facilities, in each case associated with such Gate and representing, to the extent practicable, approximately a pro rata portion of the space devoted to each such use prior to any reassignment by the Authority.

Section 4.05 Relocation.

In addition to the rights granted under Section 4.04 of this Agreement, the Authority reserves the right to relocate part or all of the Airline's Leased Premises to another location within the Terminal and associated Terminal Ramp area when necessitated by Terminal expansion, rehabilitation, or repair; compliance with federal regulation; or Airport operating considerations. The Authority will give Airline ninety (90) days advance written notice of its intent to relocate the Leased Premises and will do all things reasonably necessary, as determined by Authority, to minimize the disruption to Airline's operations. The relocation will be completed within one hundred twenty (120) days from date of written notice to Airline unless both parties agree to an alternate relocation date. Such agreement shall not be unreasonably withheld by the Authority or Airline.

Airline shall not be required to incur any expense to relocate its operations to other premises that it does not agree to incur, and the Authority shall reimburse Airline for such relocation expenses that Airline does not agree to incur together with the unamortized value of any improvements made by Airline to the vacated Leased Premises (calculated on a straight-line basis over a period of seven (7) years from the completion of such improvements), provided that the Airline shall provide the Authority with reasonable evidence of the cost of such relocation and the cost of such amortizable improvements, except that Airline shall be responsible for any and all expenses associated with the physical movement of Airline computer equipment; provided, however, Airline will not be paid or reimbursed for overhead costs or costs in any way associated with self-performance of any relocation work by Airline employees.

Notwithstanding anything to the contrary in this Section 4.05, the provisions of **Exhibit I** shall prevail over any conflicting provisions of this Section 4.05 with respect to the Project.

ARTICLE 5
TERM

Section 5.01 Term of Agreement.

Provided that this Agreement has been executed by Air Carriers operating at the Airport (i) representing greater than thirty-three percent (33%) in number of the Signatory Airlines under the Prior Agreement and (ii) carrying greater than fifty percent (50%) of the total Enplaned Passengers reported by Signatory Airlines for Fiscal Year 2019 (the "***Minimum Effective Threshold***"), this Agreement shall become effective retroactive to the Effective Date. [Note: The Agreement was executed by the Minimum Effective Threshold and became effective as of the

Effective Date.] An Air Carrier operating a passenger Air Transportation Business at the Airport may execute this Agreement at any time, but if such Air Carrier does not execute this Agreement either before or within four (4) weeks after the date that the Minimum Effective Threshold is achieved (the "***Grace Period***"), such Air Carrier shall be a Non-Signatory Airline from the end of the Grace Period until the Commencement Date. The Authority and Airline agree that the Initial Term of the Original Agreement shall be extended for an additional period of seven (7) years. Unless sooner terminated pursuant to the provisions of this Agreement, this Agreement shall terminate on the Scheduled Expiration Date, December 31, 2028 (such period, the "***Initial Term***").

On the Effective Date, the Prior Agreement between the Authority and Airline shall terminate without further action by either the Authority or Airline, provided that the termination of such Prior Agreement shall not be construed as a waiver, relinquishment, or release of any claims, damages, liability, rights of action, or causes of action that either of the parties hereto may have against the other under such Prior Agreement and that have accrued before the Commencement Date. Airline's liability thereunder that survives the termination of the Prior Agreement shall not be terminated by the execution of this Agreement.

Section 5.02 Option to Extend Initial Term.

If, not less than one hundred twenty (120) days prior to the Scheduled Expiration Date, not less than thirty-three percent (33%) of the Signatory Airlines and Signatory Airlines accounting for at least fifty percent (50%) of the Enplaned Passengers in the prior Fiscal Year execute and deliver to the Authority an instrument agreeing to extend the term of the Agreement (the "***Extension Agreement***"), and the Authority countersigns the Extension Agreement within sixty (60) days of delivery of such instrument by the Signatory Airlines, then the term of this Agreement shall be extended for an additional three (3) years, ending December 31, 2031, on all of the same terms and conditions set forth herein, including without limitation the assignment of the Leased Premises to each Signatory Airline, unless sooner terminated pursuant to the provisions of this Agreement (the additional period, the "***Extended Term***" and, with the Initial Term, the "***Term***"). If the Term of the Agreement is so extended, any Signatory Airline that fails to sign an Extension Agreement on or before the date that is one hundred twenty (120) days before the Scheduled Expiration Date shall become a Non-Signatory Airline, effective on the Scheduled Expiration Date until such time as such Signatory Airline signs the Extension Agreement (if applicable).

Section 5.03 Holding Over.

A. In the event that Airline, at the request of or without objection by Authority, shall continue to occupy the Leased Premises and conduct its Airline operations beyond the term of this Agreement, such holding over shall not constitute a renewal of the Agreement, but shall be considered a month-to-month tenancy only, with or without the consent of the Authority. The month-to-month tenancy shall be subject to all terms and conditions of this Agreement. No such holding over shall be deemed to operate as a renewal or extension of the Term. Such month-to-month tenancy may be terminated by Authority or Airline by giving thirty (30) days prior written notice of said termination to the other party at any time.

B If Airline shall hold over in any portion of the Leased Premises after the termination of this Agreement and the Authority objects or does not consent to such holdover, Airline shall occupy such portion of the Leased Premises as a tenant at will. The Authority may relocate Airline in such case without compliance with the provisions of Article 4 hereof. During such tenancy, Airline shall pay to Authority Non-Signatory rates for Airline Fees and Charges. If Airline fails to vacate the Leased Premises within sixty (60) days after written notice of termination from the Authority, Airline shall pay the Authority one hundred fifty percent (150%) of Airline Fees and Charges for each period beginning more than sixty (60) days after such notice, and the Authority reserves the right to determine Airline Fees and Charges according to any methodology permitted under Applicable Law.

Section 5.04 Airline Property.

The personal property placed or installed by Airline at the Airport including, but not limited to, trade fixtures and trade equipment, shall remain the property of Airline and must be removed on or before the Expiration Date or earlier termination of Airline's occupancy of some or all of its Leased Premises at Airline's sole risk and expense. Except as a direct result of a force majeure event, Airline shall not abandon any of its property on the Leased Premises or any other portion of the Airport without the written consent of the CEO. Any damage to the Airport or any portion thereof resulting from such removal shall be paid for by Airline. In the event of termination of this Agreement, Airline shall have thirty (30) days after such termination during which to remove such property. However, the Authority shall have the right to assert such lien or liens against said property (excluding aircraft and aircraft parts) as the Authority may by Applicable Law be permitted. So long as any such property remains in the Leased Premises, Airline's obligation to pay Airline Fees and Charges shall continue with respect to such Leased Premises.

At the end of the Term of this Agreement, if Airline applied all or a portion of its Fit-Out Allowance to the cost of proprietary ticket counters and/or finishes, and if Airline does not enter into a new or extended agreement, Airline shall either (x) repay the portion of the Fit-Out Allowance applied to such proprietary ticket counters or finishes with interest thereon at the average rate borne by the Bonds accruing from DBO until the date of such repayment, or (y) restore its ticket counters and finishes to the standards set forth in the Authority's design standards, as then in effect.

If Airline's property is not removed as herein provided, the Authority may, at its option, after written notice to Airline and at Airline's sole risk and expense, remove such property to a public warehouse for storage, or retain the same in the Authority's possession, and after the expiration of thirty (30) days sell the same, with notice and in accordance with Applicable Law, the proceeds of which shall be applied, first, to the expenses of such removal and sale, second to any sum owed by Airline to the Authority, and any balance remaining shall be paid to Airline.

ARTICLE 6
PAYMENT OF RENTALS, FEES AND CHARGES

Section 6.01 Information on Airline Operations.

A. Not later than ninety (90) days prior to the end of each Fiscal Year, Airline shall furnish the Authority with an estimate of (i) the total Maximum Gross Landed Weight of all aircraft to be landed at the Airport by Airline during the next ensuing Fiscal Year; and (ii) the number of Airline's Enplaned Passengers during the next ensuing Fiscal Year.

B. Not later than the tenth (10^{th}) day of each month of each Fiscal Year, Airline shall complete and file with the Authority written or electronic reports on forms provided or approved by the Authority describing activity conducted by Airline during such month and setting forth the information reasonably requested by the Authority or otherwise necessary for the Authority to calculate Airline Fees and Charges. Such activity reporting shall include, but not be limited to, the following:

1. Airline's and its Affiliates' Revenue Aircraft Arrivals and Maximum Gross Landed Weight of Revenue Aircraft Arrivals;

2. Airline's and its Affiliates' Enplaned Passengers (including connecting and through passengers), Deplaned Passengers (including connecting and through passengers), international and domestic passengers, revenue and non-revenue passengers, and inbound and outbound bags delivered to the Baggage System;

3. Revenue Aircraft Arrivals, Maximum Gross Landed Weight, Enplaned Passengers, Deplaned Passengers, and inbound and outbound bags delivered to the Baggage System of aircraft ground handled by Airline (other than Affiliates);

4. the amount of enplaned and deplaned freight, mail, and other cargo of or ground handled by Airline;

5. the Airline's and its Affiliates' number of arriving international passengers using the FIS Facilities;

6. the number of aircraft parked at Authority-designated Airport locations outside of the Airline's Preferential Aircraft Parking Positions and the number of hours that such aircraft were so parked;

7. the number of Turns on Common Use Facilities; and

8. such information regarding the collection and payment to the Authority of PFCs as may be required in the FAA's record of decision or Applicable Law.

C. Airline shall maintain at its principal office and, if the Authority so requests, make available at the Airport such books, records, and accounts as are relevant to the determination of Airline Fees and Charges, and, upon written notice to Airline, shall be made available at the Airport for audit and/or examination by the Authority or its duly authorized representative during all normal business hours. Such books, records, and accounts shall be retained for a period of three (3) years subsequent to the end of the Fiscal Year for which the activities are reported therein, or such other retention period set forth in 14 CFR Part 249. If such books, records, and accounts are not maintained at the Airport, Airline shall produce such books and records at the Airport within thirty (30) calendar days of the Authority's notice to do so or pay all reasonable expenses, including, but not limited to, transportation, food, and lodging, necessary for an auditor selected by the Authority to audit said books and records at alternative facilities. The CEO and Authority officials, and such persons as may be designated by them, shall have the right, during such audit and/or examination, and in the company of an employee of Airline, to examine, make copies of, and take extracts from such books, records, and accounts, but only as necessary to insure compliance by Airline with the terms of this Agreement. The cost of such audit (other than Airline's personnel cost and cost to prepare, maintain, and deliver access to such records, and the Authority's expenses related to an off-Airport audit or examination) shall be borne by the Authority, unless either or both of the following conditions exist, in which case, the cost of the audit shall be borne by the audited Airline:

1. The audit reveals an underpayment of more than two percent (2%) by category of Airline Fees and Charges due on an annual basis hereunder, as determined by said audit; or

2. Such Airline has failed to maintain true and complete records in accordance with this Section 6.01

D. Upon the request of the Authority, Airline shall submit to the Authority customary operating information requested by the Authority including but not limited to the following: projected levels of operations, schedules, planned aircraft parking position utilization, type of aircraft using the Airport, operation procedures that might have an effect on the Airport (such as power out and push out procedures), snow plans, deicing procedures, and canceled trip arrangements.

E. The Authority shall have the right, but shall not be required, to rely on Airline's activity reports in determining its Airline Fees and Charges due hereunder. The Authority may also rely on alternative sources of information, such as FAA statistics and electronic data collection systems, or shall be entitled to approximate such activity information using any sources or methods deemed reasonable by the Authority (e.g., using aircraft seats as a method to estimate passenger information), to determine Airline Fees and Charges due hereunder. Use of such alternative sources and methods by the Authority shall not relieve Airline of its reporting obligations hereunder. To the extent there is a discrepancy between the information provided by Airline and information gathered from other sources, the Authority's determination as to the most reliable and accurate information shall be conclusive and binding on the parties, absent fraud or manifest error; provided, however, that Authority shall use reasonable efforts to reconcile the discrepancy. Airline shall have full responsibility for the accuracy of its reports. In the event Airline fails or refuses to timely deliver or make available to the Authority any requested information or reports, Airline shall be in default under this Agreement, subject to notice and cure as provided in Section 15.01(D)(3).

Section 6.02 Landing Fees.

A. The Landing Fee for each Revenue Aircraft Arrival at the Airport of an aircraft operated by a Signatory Airline shall be an amount equal to the product of (i) the number of thousands of pounds of the Maximum Gross Landed Weight of the aircraft involved in the Revenue Aircraft Arrival multiplied by (ii) the Landing Fee Rate, calculated in accordance with the methodology set forth in **Exhibit E**.

B. On the Effective Date, and annually on each January 1 thereafter during the term of this Agreement, the Landing Fee Rate shall be established on a residual basis to recover the budgeted "***Net Airfield Cost***" as computed in accordance with **Exhibit E** of this Agreement.

1. If the calculation of the Landing Fee Rate contemplated in this Section 6.02 is not completed by January 1 for any reason, the rate then in effect shall continue to be paid by Airline until such calculation of the adjusted rate is completed. The adjusted fee will be retroactive to the first day of the Fiscal Year and any payments by the Airline to the Authority shall be adjusted accordingly.

2. The Authority will require all persons landing an aircraft in a Revenue Aircraft Arrival to pay a Landing Fee or be the duly authorized recipient of a landing fee waiver under an Authority incentive program for use of the Airfield. The Authority shall establish a Cargo Landing Fee for All-Cargo Air Carriers that sign an operating agreement with the Authority equal to one hundred ten percent (110%) of the Landing Fee Rate. The Authority shall also establish a Non-Signatory Airline Landing Fee for Air Carriers that do not sign an operating agreement with the Authority equal to one hundred twenty per cent (120%) of the Landing Fee Rate. Affiliate(s) of Airline permitted hereunder shall be charged the Landing Fee Rate applicable to Signatory Airlines.

Section 6.03 Terminal Rentals.

A. Commencing on the Commencement Date and thereafter throughout the term of this Agreement, Airline hereby agrees, subject to the provisions of Section 6.03(B) below, to pay the Authority rent for its Leased Premises at the Terminal Rental Rate per square foot per year, calculated in accordance with the methodology set forth in **Exhibit E**, multiplied by the square feet of the Leased Premises in the Terminal; provided, however, that after DBO, Terminal Rentals for Common Use Baggage Premises shall be apportioned in accordance with Section 6.03(B)(3) herein.

B. On the Effective Date, and annually on each January 1 thereafter during the Term of this Agreement, the Terminal Rental Rate shall be established on a residual basis to recover the budgeted "***Net Terminal Area Cost***" as computed in accordance with **Exhibit E** of this Agreement.

(1) If the calculation of the rate contemplated in this Section 6.03 is not completed by January 1 for any reason, the rate then in effect shall continue to be paid by Airline until such calculation of the adjusted rate is completed. The adjusted rate will be retroactive to the first day of the Fiscal Year and any payments by the Airline to the Authority shall be adjusted accordingly.

(2) Except as provided in Section 6.03(B)(7) of this Agreement, for any space occupied or used by Airline in the Terminal but not leased as part of this Agreement, Airline shall pay Authority a rental rate equal to no less than one hundred twenty per cent (120%) of the Terminal Rental Rate.

(3) With regard to the Common Use Baggage Premises, after DBO, costs shall be allocated and Common Use Baggage Charges shall be paid by Airline in the following manner:

Ninety percent (90%) of Common Use Baggage Premises Costs, net of amounts paid by Non-Signatory Airlines, shall be allocated to each Signatory Airline using the Common Use Baggage Premises, based on the Airline's percentage share of total Enplaned Passengers forecasted at the Airport for the Fiscal Year for which rates will be set.

Ten percent (10%) of Common Use Baggage Premises Costs (the "***Fixed Baggage Costs***"), net of amounts paid by Non-Signatory Airlines, shall be allocated equally among all Signatory Airlines using the Common Use Baggage Premises; provided, however, that the Authority shall pay from Other Authority Revenues such Fixed Baggage Costs in each Fiscal Year to the extent that such Other Authority Revenues are available therefor. Such charges shall be determined based on the number of Signatory Airlines using such space each December 1 for the following Fiscal Year. Should the number of Signatory Airlines meeting these criteria increase or decrease after December 1, an adjustment will be made accordingly for the remainder of the Fiscal Year.

Non-Signatory Airlines using the Common Use Baggage Premises shall pay a fee per Enplaned Passenger, as established by the Authority in the rates adopted annually. This per Enplaned Passenger fee shall be in an amount equal to the calculated effective rate per Enplaned Passenger for the Common Use Baggage Premises plus a Non-Signatory premium of twenty percent (20%) of the Signatory Airline rate and shall be applied to reduce the Common Use Baggage Premises Costs recovered from Signatory Airlines.

(4) With regard to Terminal Rentals for holdrooms, notwithstanding Section 6.03(A), a "***Gate/Holdroom Fee***" will be calculated each Fiscal Year to recover the Costs associated with such facilities based upon the average square footage of a holdroom in the Terminal multiplied by the Terminal Rental Rate plus the Terminal Ramp Requirement (per Section 6.03(B)(9)) per Gate (collectively, the "***Gate/Holdroom Requirement***").

(5) Prior to DBO, Signatory Airlines using the Automated Baggage System (and not paying a Facility Fee) shall pay to the Authority an amount equal to the sum of the following, allocated to each such Signatory Airline based upon the number of such Signatory Airline's Enplaned Passengers divided by the number of all Enplaned Passengers of Air Carriers leasing space in such system, as follows:

(a) $18.14 for Fiscal Year 2020, adjusted pursuant to Section 7.06 annually thereafter until DBO by the increase in CPI, multiplied by the total number of square feet of apron level space leased to accommodate such Automated Baggage System;

(b) A capital charge for the unamortized balance of historical debt allocable to the Automated Baggage System in the amount of $303,700 in Fiscal Year 2020 and $93,100 in Fiscal Year 2021; and

(c) the direct O&M Expenses associated with the operation and maintenance of the space described above.

(6) Prior to DBO, Signatory Airlines using the south Common Use Baggage Premises and not paying a Facility Fee shall pay to the Authority an amount equal to the direct O&M Expenses associated with the operation and maintenance of the south baggage system, allocated to each such Signatory Airline based upon the number of Airline's Enplaned Passengers divided by the number of all Enplaned Passengers of Air Carriers leasing space in such system. If Airline only uses the south baggage system for inbound baggage and not outbound baggage (or vice versa), then the Enplaned Passengers used in such allocation will be reduced by fifty percent (50%).

(7) For each Turn at a Common Use Facility, Airline shall pay a Facility Fee established by the Authority from time to time following consultation with the Signatory Airlines. Attached hereto as **Exhibit M** is the calculation of the Facility Fee in effect as of the Effective Date.

(8) For its use of the Shared Use Premises included in the Leased Premises, Airline shall be charged its pro rata share of the Terminal Rental Rate per square foot of such Shared Use Premises, determined as follows: The Airline's pro rata share for Shared Use Premises shall be the proportion of the Airline's total Exclusive Use Premises served by such Shared Use Premises to the total of all Exclusive Use Premises served by such Shared Use Premises. If there is any change in the amount of Exclusive Use Premises leased by any Signatory Airline during a Fiscal Year, the foregoing formula will be adjusted to account for the proportionate change in use.

(9) The "***Terminal Ramp Requirement***" shall be as follows:

(a) From Fiscal Year 2020 through DBO, the Terminal Ramp Requirement per holdroom for Gates leased by Airlines operating aircraft of twenty (20) seats or less shall be Ten Thousand Dollars ($10,000) per year as increased by CPI as provided in Section 7.06 in each of Fiscal Years 2021 through DBO, and Fifteen Thousand Dollars ($15,000) per year beginning at DBO, as subsequently increased by CPI each year.

(b) From Fiscal Year 2020 through DBO, the Terminal Ramp Requirement per holdroom for Gates leased by Airlines operating aircraft of greater than twenty (20) seats shall be Forty Thousand Dollars ($40,000) per year as increased by CPI as provided in Section 7.06 in each of Fiscal Years 2021 through DBO, and Fifty Thousand Dollars ($50,000) per year beginning at DBO, as subsequently increased by CPI each year.

(c) For use of aircraft parking positions that are not included in Airline's Leased Premises, Airline shall pay a fee per period of such use as determined by the Authority from time to time.

(10) Airline shall be charged a fee established by the Authority each Fiscal Year per arriving international passenger that disembarks from an aircraft operated by Airline or an Affiliate using the FIS Facilities (the "***FIS Fee***").

(11) Airline shall be charged a fee to reimburse the Authority for any special tenant fit-outs to its Leased Premises in excess of Airline's Fit-Out Allowance, if any, as set forth in **Exhibit I**.

Section 6.04 Payment of Airline Fees and Charges.

A. Payments of one-twelfth (1/12) of (i) the total Terminal Rental for Airline's Exclusive Use Premises, Shared Use Premises, and Preferential Use Premises (including the Gate/Holdroom Fee) and Common Use Baggage Charges, each as calculated as provided in Section 6.03; (ii) Automated Baggage System fees as provided in Section 6.03(B)(5); and (iii) amortization of Airline's fit-out costs in excess of Airline's Fit-Out Allowance, as set forth in **Exhibit I** and as provided in Section 6.03(B)(11), shall be due in advance, without demand or invoice, on the first day of each month. Such payment shall be deemed delinquent if payment is not received by the tenth (10^{th}) day of the month.

B. Payment of Landing Fees, calculated as provided in Section 6.02; south baggage system fees, calculated as provided in Section 6.03(B)(6); Facility Fees, calculated as provided in Section 6.03(B)(7); FIS Fees as provided in Section 6.03(B)(10); and aircraft parking charges, calculated as provided in Section 6.03(B)(9)(c), shall be due no later than the tenth (10^{th}) day of each month, and shall be deemed delinquent if not received within fifteen (15) days after the due date.

C. Payment of fees payable on account of any concession type activity shall be due without demand or invoice on the fifteenth (15^{th}) day following the month revenue is earned by Airline, and shall be deemed delinquent if payment is not received within thirty (30) days after the due date.

D. Payment for all other fees and charges due the Authority shall be due thirty (30) days from the Authority's issuance of an invoice therefor and shall be deemed delinquent if payment is not received within ten (10) days after the due date for such amounts.

Section 6.05 Passenger Facility Charges.

A. Airline shall remit to the Authority each month all Passenger Facility Charges collected by Airline during the preceding month for passengers enplaning at the Airport.

B. Airline shall hold the net principal amount of all PFCs that are collected by Airline or its agents on behalf of the Authority pursuant to 49 U.S.C. § 40117 (the "***PFC Act***") and the rules and regulations thereunder (14 C.F.R. Part 158, herein, the "***PFC Regulations***") in trust for the Authority. For purposes of this Section, net principal amount shall mean the total principal amount of all PFCs that are collected by Airline or its agents on behalf of the Authority, reduced by all amounts that Airline is permitted to retain pursuant to Section 158.53(a) of the PFC Regulations and any PFCs refunded to passengers in accordance with the PFC Regulations (such net principal amount, "***PFC Revenue***"). Airline acknowledges that all PFCs collected for such approved purpose neither belong to nor are owned by Airline except to the extent set forth in applicable federal law and, unless the status of PFCs in the possession of Airline are characterized in a separate manner under FAA regulations (in which case such characterization shall prevail), that such PFCs are held in trust by Airline for the exclusive use and benefit of the Authority. Airline shall not make any claim in any document or proceeding that, for PFCs collected by Airline on behalf of the Authority, the Airline has any legal or equitable interest in such PFCs, except to the extent Airline is specifically granted such interest by federal statute or regulation, including the right of reimbursement from such PFC funds for the Airline's costs of collection.

C. If Airline fails to remit PFC Revenue to the Authority within the time limits established by the PFC Regulations, Airline shall be deemed to be in default pursuant to Article 15. In addition, any late payment of the PFC may be subject to late fees computed at the rate of one and one-half percent (1.5%) per month or, if less, the highest rate permitted by Applicable Law, from the due date until paid, to the extent allowed by Applicable Law.

D. Airline acknowledges that the Authority has given to the United States of America, acting by and through the FAA, certain assurances under the PFC Act and the PFC Regulations, including Appendix A thereto (the "***PFC Assurances***"), and Airline agrees that this Agreement shall be subordinate and subject to all PFC Assurances. In the event the FAA requires any modification of this Agreement as a condition precedent to the Authority's collection of PFCs or as a means to effect Authority's compliance with the PFC Act, the PFC Regulations, or the PFC Assurances, Airline shall not withhold its consent to any modification of this Agreement required by the FAA as may reasonably be required for Authority to collect PFCs or to comply with the PFC Act, PFC Regulations, and/or PFC Assurances.

Section 6.06 Place of Payment; Late Payments.

A. All amounts due from Airline hereunder shall be paid in lawful money of the United States of America, by automated clearinghouse ("***ACH***") transfer, payable to The Allegheny County Airport Authority, which shall be delivered according to ACH directions provided by the Authority to Airline from time to time or, if directed by the Authority in writing, by mail, postage prepaid to:

Finance Section
The Allegheny County Airport Authority
P.O. Box 642632
Pittsburgh, PA 15264-2623

or such other method, including wire transfer, or place in the United States of America as may be hereafter designated by the CEO.

B. Any amount which is not paid when due shall bear interest from its due date at a rate of one and one-half percent (1.5%) per month or, if less, the highest rate permitted under Applicable Law.

C. Amounts due the Authority from any Air Carrier (including any amounts due to the Authority pursuant to Section 14.01) that remain unpaid after the Authority's commercially reasonable efforts to collect the same, will be included as a bad debt expense in the calculation of Airline Fees and Charges hereunder when more than ninety (90) days past due and deemed by the Authority to be uncollectible. The Authority shall diligently pursue all appropriate remedies to collect all unpaid amounts from all Signatory and Non-Signatory Airlines and any other tenants or users of the Airport which are delinquent, and all such unpaid amounts collected, if any, and interest thereon, if any, shall be included in Non-Airline Revenues for the Fiscal Year in which collected.

Section 6.07 Other Fees and Charges.

To the extent applicable, Airline shall also pay its pro rata share, based upon its usage compared to usage by other Air Carriers, of the following Airline Fees and Charges, each as established from time to time by the Authority, which amounts, when allocated, shall be allocated to and between Cost Centers deemed most appropriate in the reasonable discretion of the Authority:

A. Charges for additional equipment and services purchased or provided by the Authority for Airline's use (e.g., club room finishes, or any other systems or equipment).

B. Fees for services, equipment, or facilities not otherwise enumerated in this Agreement, but provided by the Authority or its contractors and utilized by Airline, including, but not limited to, fees and charges for special maintenance of Airline's Leased Premises or mechanical lifts.

C. Privilege fees for services provided by Airline for another Air Carrier, if such services or concessions would otherwise be available from a concessionaire or licensee of the Authority, in an amount equal to those privilege fees charged to such concessionaire or licensee; provided, however, that no fees shall be collected in connection with services provided by Airline to its Affiliates, or to Airline by its Affiliates.

D. Fees for use of the employee parking area(s) provided at the Airport.

E. All applicable sales, use, intangible, and ad valorem taxes of any kind, payable in connection with the use or occupancy of Airline's Leased Premises, the real property and any improvements thereto, whether levied against Airline or the Authority. Airline shall also pay any other taxes or assessments against the Airline's Leased Premises. Airline may reserve the right to contest such taxes and withhold payment of such taxes upon written notice to the Authority of its intent to do so, so long as the nonpayment of such taxes does not result in a lien against any property of the Authority or any improvements thereon or a direct liability on the part of the Authority. The Authority agrees to forward promptly to the Airline any notices of such taxes and assessments due upon receipt of same.

Section 6.08 Charges to Non-Signatory Airlines.

A. Except with respect to landing fees for All-Cargo Air Carriers that enter into an operating agreement with the Authority, the Authority shall charge all Non-Signatory Airlines which use the Airport Landing Fees for the use of the Airfield and Terminal Rental and Common Use Baggage Charges for use of the Terminal at rates which are in each case not less than one hundred twenty percent (120%) of the rates charged by the Authority to the Signatory Airlines; provided, however, that the Authority shall charge an Air Carrier operating only aircraft in scheduled operations at the Airport with less than twenty (20) seats the rates charged to a Signatory Airline.

B. The costs and revenues associated with the Common Use Facilities and Common Use Baggage Premises shall be included in the calculation of the Net Terminal Area Cost pursuant to Section 6.03.

Section 6.09 Security Deposits.

A. In order to guarantee the timely payment of all Airline Fees and Charges, and unless Airline has provided regularly scheduled passenger flights to and from the Airport for the eighteen (18) months prior to the Effective Date (or prior to the assignment of this Agreement to Airline) without committing an act or omission that would have been an Event of Default if this Agreement had been in effect during such period, Airline shall provide the Authority on the Commencement Date (or on the assignment of this Agreement to Airline) with a Security Deposit in the form of a bond or letter of credit in an amount equal to one-fourth (1/4) of the Airline Fees and Charges expected to be payable by Airline for the ensuing Fiscal Year. Airline shall be obligated to maintain such Security Deposit in effect until the expiration of eighteen (18) consecutive months during which Airline commits no Event of Default (including any period prior to the Commencement Date or prior to the assignment of this Agreement to Airline during which Airline provided regularly scheduled passenger flights to and from the Airport, and for any such prior period, no act or omission that would have been such an Event of Default hereunder). In the event that any such Security Deposit shall be for a period of less than the full period required by this Agreement, or if such Security Deposit may be canceled, Airline shall provide a renewal or replacement Security Deposit for the period following the expiration or cancellation of such Security Deposit previously provided at least sixty (60) days prior to the date on which such previous Security Deposit expires or at least sixty (60) days prior to the effective date of such cancellation.

B. If Airline shall commit an Event of Default, the Authority shall have the right: (i) to demand payment of the letter of credit or bond and use the proceeds thereof to pay such

Airline's Airline Fees and Charges then due and payable; or (ii) by written notice to Airline given at any time within ninety (90) days of such Event of Default, to impose or re-impose the requirements of Section 6.09(A) on Airline. In such event, Airline shall, within ten (10) days from its receipt of such written notice, provide the Authority with the required Security Deposit and shall thereafter maintain such Security Deposit in effect until the expiration of a period of eighteen (18) consecutive months during which Airline commits no Event of Default. The Authority shall have the right to reimpose the requirements of Section 6.09(A) on Airline each time Airline commits such an Event of Default during the term of this Agreement. The Authority's rights under this Section 6.09 shall be in addition to all other rights and remedies provided to the Authority under this Agreement.

C. In the event the Authority is required to draw down or collect against Airline's Security Deposit for any reason, Airline shall, within fifteen (15) business days after the Authority's written demand, take such action as may be necessary to repost a letter of credit or bond to reinstate the Security Deposit to its required amount (three months' estimated Airline Fees and Charges) or to provide an additional or supplemental Security Deposit from another source so that the aggregate of all Security Deposits provided by Airline is equal to three months' estimated Airline Fees and Charges payable.

D. If Airline is not required to have a Security Deposit in place at any time, then, upon the occurrence of any act or omission that is a breach of any obligation hereunder, or upon the failure of such Airline to pay any Airline Fees and Charges hereunder when due for sixty (60) consecutive days, the Authority, by written notice to such Airline given at any time within ninety (90) days after the date such event becomes known to the Authority, may impose or reimpose the Security Deposit requirements of this Section on such Airline. In such event, such Airline shall provide the Authority with the required Security Deposit within ten (10) days from its receipt of such written notice and shall thereafter maintain such Security Deposit in effect until the requirement for such Security Deposit has been waived by the Authority.

E. Any Security Deposit provided hereunder is not "property of the estate" for purposes of Section 541 of the Bankruptcy Code, it being understood that any Security Deposit is property of the third party providing it (subject to the Authority's ability to draw against the Security Deposit).

Section 6.10 Right to Contest; No Abatement or Set-off.

A. The payment by Airline to the Authority, and the acceptance by the Authority from Airline, of any amount hereunder shall not preclude either Airline or the Authority from questioning the accuracy of any statement on the basis of which such payment was made, or preclude the Authority from making any claim against Airline for any additional amount payable by Airline hereunder, or preclude Airline from making any claim against the Authority for credit for any excess amount paid by Airline hereunder.

B. Notwithstanding the foregoing, Airline shall not abate, suspend, postpone, set-off, or discontinue any payments of rentals, fees, and charges payable hereunder.

Section 6.11 No Other Fees and Charges.

The Authority agrees that no rents, fees, charges, taxes or assessments of any nature, other than herein expressly referred to or provided for, shall be imposed by the Authority upon any of the Signatory Airlines, its employees, agents, passengers, contractors, customers, suppliers of materials or furnishers of services for the use of or access to the Airport or the exercise by Airline of any of its rights granted in Article 2 or otherwise directly or indirectly relating to the conduct of such party's business at the Airport; provided, however, that the foregoing shall not be construed to prohibit the Authority from imposing and collecting charges and fees (i) for the use of the Airport's equipment, facilities, or labor to recover the cost of such equipment, facilities, or labor (to the extent not recovered under Section 6.07(B)); (ii) for the use of the public vehicle parking areas on the Airport; (iii) from operators of ground transportation to, from, and on the Airport; (iv) from any concessionaire at the Airport in accordance with the terms of a contract with the Authority for the operation of such concession; (v) for badging employees and contractors of Airline and recovering the costs associated with such badging process; (vi) recovering costs advanced by the Authority and due to be reimbursed by Airline, including without limitation, penalties imposed on Authority by virtue of violations of Applicable Law or the Rules and Regulations by Airline or any Airline Party, or curing defaults by Airline; (vii) for costs for facilities (including Special Facilities) or services provided expressly to Airline; (viii) from any person, other than an Air Carrier, for access to the Airport for the conduct of its business; and (ix) for any other goods or services provided by written agreement. The foregoing provisions of this Section 6.11 shall only apply to taxes to the extent permitted by Applicable Law and shall not apply to broad-based taxes of general application which are not directly or indirectly targeted to any or all of the Air Carriers using the Airport, their employees, passengers, contractors, customers, suppliers of materials, or furnishers of services.

ARTICLE 7
CALCULATION OF RENTALS, FEES AND CHARGES

Section 7.01 Cost Centers.

The Cost Centers have been created by the Authority in order to allocate the net cost of operating, maintaining, and developing the Airport System among all of the Signatory Airlines and the other users and tenants of the Airport System. The aggregate of Airline Fees and Charges payable by all Signatory Airlines, together with other revenues required to be applied by the Authority hereunder, for each Fiscal Year shall be sufficient to pay the Costs for such Fiscal Year, including the satisfaction of all of the Authority's obligations to make all Fund Deposit Requirements and other payments required under the Indenture.

Section 7.02 Airport Budget.

Not later than thirty (30) days prior to the beginning of each Fiscal Year, the Authority shall furnish Airline for its review and comment the annual operating and capital budgets for the Airport for such Fiscal Year (the "***Annual Budget***") and a calculation of the estimated annual Airline Fees and Charges for such Fiscal Year calculated based upon such Annual Budget and the methodology set forth in **Exhibit E**, and the Authority shall hold a meeting with the Signatory Airlines and all other Air Carriers operating at the Airport to discuss the Annual

Budget and the estimated annual Airline Fees and Charges for the upcoming Fiscal Year. The Authority shall give due consideration to all comments, suggestions, and requests by Airline regarding such Annual Budget and estimated annual Airline Fees and Charges.

Until all CARES Act funds are committed, the Authority agrees to inform the Signatory Airlines on a quarterly basis with respect to the Authority's receipt and use of CARES Act Funds, including the amount of CARES Acts Funds expected to be received by the Authority, the Authority's intended uses of such funds and the anticipated effect on Airline Fees and Charges. The Authority further agrees that if requested by Airline, the Authority will meet and confer with the Airline regarding the Authority's use of CARES Act Funds, including giving due consideration to any request from the Airline regarding such uses.

Airline acknowledges that the Authority has historically invested considerable funds, annually, from Authority discretionary sources to supplement airport revenues and offset Airline Fees and Charges. It is the intention of the Authority to maintain Airline Fees and Charges at a reasonable level for all Air Carriers serving the Airport. In order to do so, prior to each Fiscal Year as part of developing the Annual Budget, in consultation with the Air Carriers, the Authority will consider the application of a portion of the Authority's available discretionary non-aeronautical revenues to reduce such Airline Fees and Charges, to the extent practicable in the CEO's sole determination.

Section 7.03 <u>Adjustment of Airline Fees and Charges.</u>

A. If at any time during a Fiscal Year the Authority's forecast based upon its most recently available information with regard to expenses and revenues actually incurred or realized during such Fiscal Year, together with the most recently available information with respect to Airline Fees and Charges actually received by the Authority, indicates that payment of any component of Airline Fees and Charges by Signatory Airlines at the then-existing rates would result in an underpayment or overpayment of five percent (5%) or more of the amount required under this Agreement to be generated by the Authority through such component of Airline Fees and Charges during such Fiscal Year, the Authority may adjust the remaining monthly Airline Fees and Charges for such Fiscal Year to conform to its current projection. At least one month prior to the implementation of an adjustment, the Authority shall consult with the Signatory Airlines. The Authority may lower rates at any time without Signatory Airline approval.

B. Notwithstanding anything to the contrary, nothing herein will limit the ability of the Authority to adjust rates, fees and charges from time to time, in order to meet the requirements of the Indenture, including, without limitation, meeting Debt Service Reserve Fund requirements, the rate covenant, and flow of funds requirements under the Indenture; provided, however, that after the date that the Authority receives executed Agreements from a Minimum Effective Threshold of Signatory Airlines, the Authority shall not, without consultation with the Signatory Airlines, grant any waivers of rents, fees, or other charges, except as contractually required or required by Applicable Law, that would reduce Non-Airline Revenues and result in a direct increase to Airline Fees and Charges of the Signatory Airlines of more than five percent (5%) over and above the annual Airline Fees and Charges of the Signatory Airlines which would otherwise be projected by the Authority.

C. Notwithstanding any other provision of this Agreement, if the Authority incurs a significant one-time cost during the term of this Agreement (e.g., implementation of a new Government Accounting Standards Board promulgation) that would result in a significant one-time cost to the rate base, the Authority may, at its sole discretion, choose to allocate that cost over a reasonable period.

D. The Authority will provide the Signatory Airlines a minimum of thirty (30) days' notice of any increase in Airline Fees and Charges.

Section 7.04 Year-End Adjustment of Airline Fees and Charges.

A. On or before April 30 of each Fiscal Year, the Authority shall recalculate and adjust Airline Fees and Charges in effect during the preceding Fiscal Year and provide Airline with a statement of the actual annual Airline Fees and Charges for the preceding Fiscal Year. The Authority's adjustment shall be based on the calculation procedures established in this Agreement, but shall use actual Costs, revenues, Leased Premises, Revenue Aircraft Arrivals, Enplaned Passengers, and Maximum Gross Landed Weight for the previous Fiscal Year.

B. In the event that Airline's Airline Fees and Charges actually paid during such preceding Fiscal Year exceed the amount of Airline's Airline Fees and Charges required (as recalculated based on actual results), Airline shall receive a reimbursement in the amount of such overpayment within thirty (30) days after such recalculation. If the amount of Airline Fees and Charges paid by Airline were less than the amounts required, Airline shall pay to the Authority within thirty (30) days of its receipt of the Airline's actual Airline Fees and Charges the amount of such deficiency.

C. Notwithstanding the foregoing, if an Event of Default with respect to Airline has occurred and not been cured pursuant to Article 15 after any applicable notice and opportunity to cure, the Authority is hereby granted a right of set-off and may apply the amount of such overpayment by Airline to pay or reimburse any and all amounts owed to the Authority by Airline under this Agreement, or to pay any cost or expenses or material damages incurred by the Authority as a result of Airline's default under this Agreement.

Section 7.05 Deposits into Funds.

Each Fiscal Year, the Authority shall deposit the Fund Deposit Requirement for each fund for such Fiscal Year, calculated as provided in **Exhibit E**.

Section 7.06 Adjustments to Fund Deposit Requirements and Other Dollar Amounts.

On October 1 of each Fiscal Year, and, initially, no later than January 1, 2020, specific dollar amounts referenced in this Agreement as being increased by CPI shall be adjusted for the next succeeding Fiscal Year by multiplying such amounts by a factor of one (1) plus the percentage increase (but not decrease), if any, in CPI during the most recently ended twelve-month period for which such CPI is available.

ARTICLE 8
ENVIRONMENTAL

Section 8.01 Compliance with Environmental Laws and Authority Rules and Regulations.

Airline hereby covenants and agrees to comply, and to require all Airline Parties to comply, with all applicable Environmental Laws and Rules and Regulations of the Authority in connection with its use and occupancy of the Leased Premises and any Airport facilities and property. In the event of any noncompliance with Environmental Laws or Rules and Regulations, Airline shall take prompt and appropriate action to address the conditions causing the noncompliance and return to full compliance. In the event of any conflict between requirements of Environmental Laws and the Rules and Regulations, the more restrictive requirement shall apply; provided, however, as long as compliance with a more restrictive Rule or Regulation does not violate a requirement of any Environmental Law.

Section 8.02 Environmental Documents.

Airline shall upon request make available for review by the Authority copies of all permits, approvals, certificates, registrations, and other authorizations issued by any Governmental Authority as required under Environmental Laws for Airline's activities at the Leased Premises and any Airport facilities and property, and any correspondence between Airline and such Governmental Authority concerning compliance with Environmental Laws for Airline's activities at the Leased Premises and any Airport facilities and property.

Section 8.03 Access for Environmental Inspection.

Authority shall have reasonable access to the Leased Premises upon notice to Airline, and at reasonable times in a manner that does not unreasonably interfere with Airline's operations, to inspect the same in order to confirm Airline is using the Leased Premises in accordance with Environmental Laws. Airline and Authority shall consult regarding performance of any sampling and testing reasonably determined by the Authority to be necessary to determine whether Airline is in compliance with Environmental Laws and its obligations under this Agreement. If such testing and analysis confirms that Airline's activities would not result in a violation under any Environmental Law, the Authority shall reimburse all costs of testing and analysis expended by Airline under this Section.

Section 8.04 Duty to Notify Authority.

Airline shall promptly notify the Authority by contacting the Authority's Vice President of Sustainability and Natural Resources or her or his designee promptly upon discovery of any release of Hazardous Materials by Airline or any Airline Party requiring notification to any Governmental Authority under Environmental Laws.

Airline shall notify the Authority within two (2) business days of any claim, demand, action, or notice made against Airline by any third party, including any Governmental Authority, regarding Airline's failure or alleged failure to comply with any Environmental Laws in connection with its activities at the Airport. Airline must notify Authority in writing and must provide Authority with copies of any written claims, demands, notices, or actions so made.

Section 8.05 Hazardous Materials.

To the extent required by Environmental Law, Airline shall maintain an inventory of Hazardous Materials stored or used by it or its contractors at the Leased Premises and any Airport facilities and property which inventory shall be available for inspection by the Authority. Airline shall provide the Authority copies of such inventory and Safety Data Sheets upon request by the Authority.

Airline shall not store, use, treat, or dispose of any Hazardous Materials at the Leased Premises and any Airport facilities and property except where such use, storage, use, treatment or disposal is in compliance with all applicable Environmental Laws.

Section 8.06 Storm Water Compliance.

A. Construction Stormwater. The Authority maintains a NPDES general permit for Stormwater Discharges Associated with Construction Activities for the Airport property, a copy of which is provided as **Exhibit J**. Airline shall be familiar with the applicable requirements of this permit and shall require its contractors to be familiar with the applicable requirements of this permit prior to conducting any earth disturbance or construction requiring earth disturbance at the Leased Premises and any Airport facilities and property. Airline shall coordinate with the Authority's Vice President of Sustainability and Natural Resources or her or his designee to ensure that Airline's activities comply with this permit or are covered under a separate permit, as applicable.

B. Industrial Stormwater/Spills. Airline shall maintain (unless such maintenance is otherwise the responsibility of the Authority or a third party) any fuel systems and oil water separators present at the Leased Premises to prevent discharge of petroleum contaminants into the waterways that would violate the Authority's NPDES permit. Use of soaps, surfactants, or materials in a manner that such materials are likely to enter the waterways and violate the Authority's NPDES permit is prohibited except for approved operational plane deicing and other uses specifically approved in writing by the Authority.

In the event of a spill or release of Hazardous Substances caused by Airline or its contractors at the Leased Premises or any Airport facilities and property that may be reasonably expected to cause pollution of any surface water or ground water, the Airline shall take immediate action to contain such spill or releases. In addition to any reporting requirements under Environmental Laws, any release or spill of a Hazardous Material caused or permitted by Airline must be reported to the Authority as soon as reasonably practicable, but in no event more than a twenty-four (24) hour period following Airline's knowledge of the spill or release. In the event such spill or release is determined to be beyond the Airline's ability to safely address, or if it cannot or will not be cleaned up prior to entering any storm water systems, or should the release present an immediate hazard to life or property, the Airline shall notify the Authority's Vice President of Sustainability and Natural Resources or her or his designee immediately.

C. Deicing Solutions. Airline shall comply, to the extent applicable, with the 1994 Consent Order and its provisions related to aircraft and airfield deicing and anti-icing provisions. A copy of the 1994 Consent Order is provided as **Exhibit K**. Airline shall not dispose of any waste deicing fluids/glycol on Airport property and shall maintain its deicing fluids/glycol storage facilities and dispensing vehicles so as to prevent any release that could ultimately enter the storm water and negatively impact the Authority's NPDES permit except for approved operational plane deicing. Additionally, Airline must submit a summary of its aircraft deicing, defrosting, and airfield deicing chemical usage to the Authority by the 7th day of each month.

Section 8.07 Wastewater Compliance.

The Authority operates a wastewater pretreatment facility that receives wastewater from sinks, drains, floor drains, and other sources of wastewater at the Airport. This wastewater treatment facility discharges to a publicly owned treatment works under a pretreatment permit issued to the Authority by Moon Township Municipal Authority. If Airline maintains a hangar facility at the Airport, Airline agrees it shall not discharge or allow to be discharged any materials to the pretreatment system that would interfere with the operation of the pretreatment facility or pass through or cause a bypass of treatment that may reasonably be expected to result in a violation of any pretreatment permit applicable to the Airport.

Section 8.08 Regulated Storage Tanks.

The Airline shall be responsible for regularly monitoring, testing, inspecting, and registering its regulated storage tanks, underground storage tanks ("***UST***") and above ground storage tanks, if any, in accordance with all applicable Environmental Laws. In the event that the Airline removes and/or replaces any storage tank on the Leased Premises, the Airline shall conduct or cause to have conducted an appropriate environmental subsurface investigation. A copy of the subsurface investigation report and any other related reports shall be made available to the Authority immediately after completion. Throughout the Term of this Agreement, if the Airline owns any UST, the Airline shall maintain petroleum UST insurance satisfactory to the Authority or otherwise comply with applicable financial assurance requirements under Environmental Laws. The Airline may self-insure provided that it maintains reserves and coverage similar to that provided by the Commonwealth operated UST insurance fund.

Airline shall provide the Authority copies of any Spill Prevention, Control and Countermeasures (SPCC) Plan, Preparedness, Prevention and Contingency (PPC) Plan or Spill Response Plan (SRP) that the Airline may be required to prepare and maintain under Environmental Laws, and any amendments to any such Plans. Any such Plans and amendments shall be submitted to the Authority within ten (10) calendar days after submittal to the Governmental Authority.

Section 8.09 Environmental Remediation.

Airline shall undertake such steps to remedy and/or remove any Hazardous Materials and any other environmental contamination that arises out of Airline's use of the Leased Premises or the Airport. Any such remediation shall be in accordance with Environmental Laws and shall restore the property to a condition protective of human health and the environment without reliance on unduly burdensome or costly engineering or administrative controls or restrictions on activity or use of the property. Such work shall be performed at Airline's expense. Upon reasonable written notice to Airline, the Authority may review and inspect all such work at any time using consultants and representatives of its choice at Airline's cost and expense, provided that the Authority's review and inspection does not unreasonably interfere with Airline's remediation efforts.

Section 8.10 Environmental Indemnification.

In addition to any indemnification set forth elsewhere in this Agreement, Airline hereby indemnifies and agrees to defend and hold harmless the Indemnified Parties from all costs, claims, demands, actions, liabilities, complaints, fines, citations, violations, or notices of violation arising from or attributable to: (i) a presence or release of Hazardous Materials into the environment caused by Airline or any Affiliate of Airline or an Airline officer, employee, agent or contractor at the Leased Premises or any Airport facility or property, or the subsurface, waters, air, or ground thereof, in excess of levels allowable by Environmental Laws or the violation of any Environmental Laws due to Airline's or any Airline Parties' management, control, authorization, handling, possession, or use of Hazardous Materials at the Airport; (ii) any breach by Airline of any of its warranties, representations, or covenants in this Article; (iii) Airline's remediation or failure to remediate Hazardous Materials as required by this Agreement. Airline's obligations hereunder will survive the termination or expiration of this Agreement, and will not be affected in any way by the amount of or the absence in any case of covering insurance or by the failure or refusal of any insurance carrier to perform any obligation on its part under insurance policies affecting Airport or any part thereof, except that, in the event that Authority recovers funds from insurance carriers in connection with claims associated with (i), (ii), or (iii) above, Authority may not recover the same funds from Airline. Notwithstanding the foregoing, the Airline shall have no indemnification obligation under this Section 8.10 for any costs, claims, demands, actions, liabilities, complaints, fines, citations, violations or notices of violation arising from or attributable to any release of Hazardous Substances in, on or under the Leased Premises prior to the date of Airline's first occupancy of the Leased Premises (which may pre-date the Effective Date), except to the extent materially exacerbated by the Airline or any Airline Party or invitee.

ARTICLE 9
APPROVAL OF AIRPORT IMPROVEMENTS

Section 9.01 Approval of the Project.

The Authority and Airline each hereby approve the cost of design of and certain enabling projects for the Project up to an aggregate amount not to exceed One Hundred Fifty Million Dollars ($150,000,000).

The Authority and Airline each hereby approve the cost and scope of the Project as set forth in **Exhibit I**; provided, however, that the Authority must obtain MII approval as provided in Section 9.03 prior to incurring any additional costs includable in Airline Fees and Charges for, or issuing Bonds to finance, costs of the Project other than those set forth in the immediately preceding sentence. To the extent that the cost of the Project will be includable in Airline Fees and Charges and/or the scope of the Project changes materially from that described in **Exhibit I**, the Signatory Airlines shall be entitled to a confirmation MII vote for Project approval, other than approval of the costs authorized in the first paragraph of this Section 9.01.

In the event that construction of the Project is not commenced by December 31, 2021, or thereafter if the Project is suspended for more than one hundred eighty (180) days, Airline agrees that the Authority may include any outstanding Bonds that financed the Project design and enabling projects (and if subsequently approved, construction) as direct capital charges in the calculation of the Terminal Rental Rate pursuant to Section 6.03, amortized over a period of no less than ten (10) years beginning in Fiscal Year 2022 or, if the Project is suspended, the Fiscal Year that the Project was suspended (or, in either case, a different date agreed to by the Authority and an MII). Airline further agrees not to challenge the inclusion of such capital charges in Airline Fees and Charges for the full period of its amortization.

By execution and delivery of the First Amendment, Airline agrees to construction of the TMP as set forth in this Agreement, as amended, including incurring the Estimated Project Cost and the Additional Costs as set forth therein, as amended, inclusion of such costs in Airline Fees and Charges and issuing Bonds to finance the remaining costs of the TMP, all subject to the amended **Exhibit I**. Such approval constitutes Airline's MII approval of the TMP for purposes of Sections 9.01 and 9.03 of this Agreement and Airline hereby acknowledges that all requirements of the Authority set forth in said Sections 9.01 and 9.03 have been satisfied or are hereby waived by Airline.

Section 9.02 Issuance of Bonds for the Airport.

Airline hereby authorizes the Authority, at the Authority's sole discretion, to include in the calculation of Airline Fees and Charges the Debt Service on the Bonds issued by the Authority, for any of the purposes and to the extent permitted by this Article 9; provided, however, that such Debt Service is properly allocated and allocable to a Cost Center.

Section 9.03 Majority-in-Interest Approval for Additional Projects.

A. Except as provided in Section 9.04, any Capital Project for which capital charges are to be included in Airline Fees and Charges during the Term of this Agreement, must not be disapproved by an MII of the Signatory Airlines prior to the inclusion of capital charges for such project in Airline Fees and Charges as provided in this Section 9.03. Airline hereby acknowledges that, regardless of planned funding sources, no Airline approval is required for Capital Projects other than those Capital Projects directly affecting Airline Fees and Charges. Airline acknowledges that the rights granted in this Article 9 are expressly limited to the withholding of Airline concurrence pursuant to Section 9.03 for the inclusion of capital charges of certain Capital Project(s) in Airline Fees and Charges. Airline also acknowledges that nothing contained in this Agreement in any way limits or restricts the rights of the Authority to implement any other capital project at the Airport at any time, provided that the cost of any Capital Project that is not approved in accordance with this Article 9 may not be included in Airline Fees and Charges.

B. For a Capital Project requiring approval of a Majority-in-Interest of the Signatory Airlines, the Authority shall receive approval if the Authority (1) submits a written proposal to the Signatory Airlines, which proposal shall include an estimate of (a) the cost and scope of such Capital Project, (b) the need for and benefit of such Capital Project, (c) the capital charge to be included in Airline Fees and Charges resulting therefrom, and (d) the projected completion date for such Capital Project; (2) holds a consultation meeting (the "***Consultation Meeting***") of the Signatory Airlines to discuss such Capital Project no earlier than thirty (30) days from the date such written proposal was submitted; (3) allows each Signatory Airline to register written approval or disapproval within thirty (30) days of the Consultation Meeting; and (4) an MII does not submit written disapproval of such Capital Project within such thirty (30) day period.

C. For purposes of this Article, overall MII approval of Signatory Airlines shall occur unless written disapproval from an MII of the Signatory Airlines is received by the Authority within thirty (30) days of the Consultation Meeting. Any Signatory Airline that does not register written approval or disapproval within thirty (30) days of the Consultation Meeting shall be considered to have registered approval.

Section 9.04 Capital Projects Not Subject To MII Consideration.

Notwithstanding any other provision of this Agreement or this Article 9 to the contrary, the Authority's obligation to seek MII approval of the Signatory Airlines on certain Capital Projects shall exclude the following:

A. The costs of design of and certain enabling projects for the Project as set forth in Section 9.01.

B. Reserved.

C. Any Capital Project the capital costs of which shall not be recovered through Airline Fees and Charges.

D. Any Capital Project funded wholly from moneys on deposit in the Airport System Capital Fund (the costs of which shall not be subsequently recovered or amortized through Airline Fees and Charges).

E. Any Capital Project having a capital cost, net of grants, PFCs, CFCs, and Other Authority Revenues, of One Million Dollars ($1,000,000) or less, which amount shall be adjusted annually commencing on the first day of the Fiscal Year commencing after the Effective Date and each Fiscal Year thereafter by the increase in CPI as provided in Section 7.06.

F. Any Capital Project in the Airfield Cost Center which is eligible for federal or State grant funding and for which the Authority has received grant funding commitment of at least fifty percent (50%) of the cost of the Capital Project.

G. Capital Projects required by the FAA, the Department of Transportation, the TSA, the Department of Homeland Security, or similar Governmental Authority, other than the Authority, having jurisdiction over the Airport System, any Signatory Airline's operations, or the issuance of federal or state grants to the Authority or otherwise necessary or prudent to ensure compliance with Applicable Laws, grant assurances, the Indenture, or noise mitigation obligations.

H. Projects to repair casualty damage to the Airport System property to the extent that such damage is not covered by casualty insurance (or interim financing pending receipt of insurance proceeds).

I. Except as expressly provided in **Exhibit I**, Special Facilities for which, in all cases, the tenant(s) or other user(s) thereof shall be required to pay directly or reimburse the Authority for all costs, including finance costs, associated with such facilities during the term of this Agreement, and which are not guaranteed by or a contingent liability of the Authority.

J. Improvements or additions, including all costs therefor, or other costs, expenses, damages, assessments, or judgments necessary to settle claims, satisfy judgments, or comply with judicial orders against the Authority by reason of its ownership, operation, maintenance, or use of the Airport System, including judicial orders requiring the acquisition by the Authority of additional lands or making of compensation to owners of lands for the taking thereof, or where a constructive taking has been found, or to settle a threatened taking.

K. Expenditures of an emergency nature that, if not made, would result in the closing of any of the runways or other critical aeronautical facilities of the Airport System.

L. Except as expressly provided in **Exhibit I**, expansion of the Airport facilities for the increased requirements of any Signatory Airline(s) if such Signatory Airline(s) shall agree in writing to increased rentals, fees, and charges sufficient to cover the payment of Debt Service applicable to the construction, including design and financing costs, of any Exclusive Use Premises, Shared Use Premises, Preferential Use Premises, or Common Use Baggage Premises portions of the Airport during the Term of this Agreement, and which are not guaranteed by or a contingent liability of the Authority. In the event said expansion necessitates the concurrent construction of related public or support systems, the Authority shall consult with the Signatory Airlines. The costs and expenses of such related public or support systems shall be treated under this Agreement in the same manner as the costs and expenses associated with other similar facilities and/or support systems previously constructed. This exclusion shall also be applicable to projects to accommodate a Non-Signatory Airline under the same terms and conditions; provided, however, such Non-Signatory Airline shall be required to enter into an agreement with the Authority substantially similar to this Agreement.

M. Improvements to the Airport necessary to relocate Air Carriers as set forth in Section 4.05 hereof, and the capital cost of such relocations, at the discretion of the Authority.

N. Any Capital Projects funded wholly by any grants, gifts, bequests, contributions, or donations, including any such funds provided by any person or entity, including an Air Carrier, doing business at the Airport.

O. Project formulation costs, including planning, conceptual design, architectural, and engineering studies.

Section 9.05 Other Capital Projects and Obligations; Special Facilities.

A. In addition to, and not in limitation of, any and all rights and obligations of the Authority contained in this Article 9, and subject to the provisions of this Article 9, the Authority may issue obligations (other than Bonds) and use the proceeds thereof to fund the cost of designing, constructing and equipping capital projects for the Airport System other than the Project so long as the debt service thereon and all costs related to the issuance thereof (including, but not limited to, underwriters' discount, legal fees, financial advisors' fees, other consultants' fees, credit facility fees, remarketing fees, and bond insurance premiums) are not included in the calculation of Airline Fees and Charges. Such issuance of obligations shall not require the consent of Airline or a Majority-in-Interest. These obligations may include, without limitation, special facility revenue bonds or general airport revenue bonds of the Authority.

B. The user or users of the Special Facility shall enter into an agreement with the Authority that will provide for certain payments by such Air Carrier or Air Carriers in addition to those required under this Agreement, including debt service on obligations issued to finance the design and construction of the Special Facility and the O&M Costs of such Special Facility.

Section 9.06 Exhibit I Prevails.

In the event of any conflict between the provisions of this Article 9 and those of **Exhibit I** with regard to the Project, the provisions of **Exhibit I** shall prevail.

ARTICLE 10
OBLIGATIONS OF THE AUTHORITY

Section 10.01 Operation and Maintenance.

A. The Authority shall keep the Airport System in good condition and repair. The Authority shall, in accordance with **Exhibit G-1**, prior to DBO, and **Exhibit G-2**, after DBO, operate, maintain, and make all necessary repairs and replacements to the Terminal, including all roof maintenance, structural maintenance, and maintenance of the heating, ventilating, and air conditioning systems not required to be maintained by Airline. In the interest of efficient and safe ramp operations, the Authority shall have the right to establish a central refuse removal system for all tenants on the Airport, and to charge the cost of such system to the users thereof, including all Air Carriers using such system. The Authority also shall maintain and make all necessary repairs and replacements to the assets described in clause (i) of the definition of the Airfield, the Terminal Ramp, and roadways, and the Authority shall be responsible for sweeping and removing debris from the Terminal Ramp that is not leased by an Air Carrier.

B. The Authority shall cause gas, electricity, air conditioning, heat, sewerage and water to be supplied to Airline's Leased Premises and to such public areas of the Airport as may require the same by means of outlets, lines, ducts, and pipelines existing on the Effective Date and, following completion of the Project, at DBO. The Authority may charge Airline separately for the Authority's costs of any utility requirements or uses resulting from special demands of Airline or for special utilization of equipment, including, but not limited to, ground power and conditioned air, and may require Airline to have meters installed in these instances to measure Airline's consumption. All such charges shall be applied to all Air Carriers on a uniform basis.

The Authority shall make diligent efforts to supply Airline with utility services as specified above, but if the Authority is not able to provide such utility services, such failure shall not constitute a constructive eviction. Further, the Authority shall not be liable to Airline in damages, or for any reduction in Airline Fees and Charges, or otherwise, for the interruption of utility services (including heating, ventilation, or air conditioning): (i) to the extent any utility shall become unavailable from any public utility company, public authority, or any other person or entity supplying or distributing such utility; or (ii) for any interruption in any service hereunder (including, without limitation, any heating, ventilation, or air conditioning) caused by the making of any necessary repairs or improvements unless such interruption is due to the Authority's negligence or willful misconduct; or (iii) which results from any cause beyond the reasonable control of the Authority. In no event shall the Authority be responsible to Airline for indirect or consequential damages.

C. The Authority shall be responsible for the removal of snow and ice from runways, taxiways, unleased aircraft parking positions and common use access between such areas.

D. Airline may, from time to time, request the Authority to perform any given maintenance, replacement, repair work, or other service for which Airline is responsible pursuant to Section 11.01, or any alterations, additions, or improvements authorized pursuant to Section 11.02. The Authority shall be under no obligation to perform any such services; however, if the Authority does perform any such services it shall do so on a work-order basis, and shall invoice Airline therefor in an amount equal to the Authority's cost of providing such services, plus an administrative fee of ten percent (10%) of such costs, which costs shall include all Authority direct and indirect costs, including but not limited to, all fringe and overhead rates. Nothing in this Paragraph D is intended or shall be construed to obligate Airline to use the services of the Authority personnel for the performance of any maintenance, replacement or repair work for which Airline is responsible pursuant to Section 11.01, or any alterations, additions or improvements authorized pursuant to Section 11.02.

Section 10.02 <u>Security Services.</u>

The Authority shall provide such law enforcement officers and such support personnel, facilities, services, and equipment, in such numbers at such times and at such locations which are at a minimum necessary for the Authority's compliance with the requirements of current Federal Aviation Security Regulations, currently set forth at 49 CFR Part 1500, *et seq*., or any successor regulations thereto. The costs of providing such officers, support personnel facilities, services, and equipment shall be allocated among Cost Centers in accordance with **Exhibit E**.

Section 10.03 <u>Compliance by Other Tenants.</u>

The Authority shall use commercially reasonable efforts to obtain uniform compliance by all tenants with its applicable Rules and Regulations. However, the Authority shall not be liable to Airline for any violation or non-observance of such Rules and Regulations by any tenant, concessionaire, or other person at the Airport.

Section 10.04 <u>No Warranty of Condition or Suitability.</u>

THE AUTHORITY MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, AS TO THE CONDITION OF THE LEASED PREMISES OR THAT THE LEASED PREMISES SHALL BE SUITABLE FOR AIRLINE'S PURPOSES OR NEEDS. THE AUTHORITY SHALL NOT BE RESPONSIBLE FOR ANY PATENT OR LATENT DEFECT AND AIRLINE SHALL NOT, UNDER ANY CIRCUMSTANCES, WITHHOLD ANY RENTALS OR OTHER AMOUNTS PAYABLE TO THE AUTHORITY HEREUNDER ON ACCOUNT OF ANY DEFECT IN THE LEASED PREMISES. BY ITS ENTRY ONTO THE LEASED PREMISES, AIRLINE ACCEPTS THE LEASED PREMISES IN THEIR "AS IS" CONDITION AND HEREBY WAIVES ALL CLAIMS AGAINST THE AUTHORITY ARISING ON OR AFTER THE EFFECTIVE DATE RELATING TO THE CONDITION OF THE LEASED PREMISES ARISING FROM THE CONSTRUCTION THEREOF AND ALL OTHER CLAIMS AGAINST THE AUTHORITY RELATING TO THE CONDITION OF THE LEASED PREMISES OTHER THAN THOSE ARISING SOLELY FROM THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE AUTHORITY.

ARTICLE 11
OBLIGATIONS OF AIRLINE

Section 11.01 <u>Maintenance, Replacement and Repair.</u>

A. Airline shall, at its own cost and expense, be responsible for performing, or cause to be performed, maintenance, replacement and repair of its Leased Premises in accordance with **Exhibit G-1**, prior to DBO, and **Exhibit G-2**, after DBO, and of its own personal property, whether or not the same is affixed or attached to such Leased Premises. Airline shall, at its own cost and expense, undertake snow and ice removal from its Preferential Aircraft Parking Positions.

Section 11.02 <u>Alterations, Additions and Improvements.</u>

A. Except as expressly provided herein, Airline shall make no alterations, additions, or improvements to or installations on its Leased Premises (including, but not limited to, work which could affect the architecture, utility, fire protection, or other systems for which the Authority is responsible) without the prior written permission of the Authority Engineering Department.

B. Before the commencement of any such work, detailed plans and specifications, and any amendments thereto, shall be filed with and approved by the Authority Engineering Department and all Governmental Authorities having jurisdiction thereover. All such work shall be performed subject to the Authority Tenant Request Process (as such process may be amended from time to time) and in accordance with the requirements of Applicable Law and the Rules and Regulations and, where required, each affected public utility company. As of the Effective Date, the Authority Tenant Request Process is available on request.

C. Such work shall be performed in a good and workmanlike manner and in accordance with the plans and specifications approved by the Authority Engineering Department for the same. At all times during such work, Airline and its contractor must maintain copies of all construction documents, approvals, and drawings (including redlined as-built drawings) on site and available for inspection by the Authority until the completion of the project. The Authority and township building permits must be displayed at all times until project completion. The Authority may perform random inspections during construction to determine compliance with the approved plans and specifications. The Authority reserves the right to halt any work for safety violations or work that deviates from the approved plans and specifications. Airline shall promptly commence to redo or replace and diligently pursue the same, at its sole cost and expense, prior to or after completion of such work, any work which is not performed substantially in accordance with such plans and specifications as approved by the Authority Engineering Department.

D. The Authority Engineering Department shall perform a final closeout inspection at project completion. If needed, a punch list will be developed for the Airline and its contractor to complete before the Authority will approve project completion. After the Authority accepts the final work, a set of as-built drawings, in hard copy and electronic form, must be submitted to the Authority Engineering Department within sixty (60) days, along with the total project cost. During the final inspection, a key must be provided to the Fire Department.

E. Subject to the provisions of Section 5.04, all alterations, additions, or improvements, except for Airline's personal property, equipment and trade fixtures, at any time placed upon its Leased Premises by Airline shall be deemed to be and become a part of the realty and the sole and absolute property of the Authority upon completion.

F. Airline shall promptly pay all lawful claims made against the Authority and discharge all liens filed or which exist against the Leased Premises or any other portion of the Airport (other than Airline's trade fixtures or trade equipment) arising out of or in connection with, whether directly or indirectly, the failure to make payment for work done or materials provided by Airline, its contractors, subcontractors, or materialmen. However, Airline shall have the right to contest the amount or validity of any such claim or lien without being in default under this Agreement upon furnishing evidence of security in an amount equal to one hundred fifty percent (150%) of such claim or lien that such claim or lien will be properly and fully discharged forthwith in the event that such contest is finally determined against Airline or the Authority. The Authority shall give timely notice to Airline of all such claims and liens of which it becomes aware.

G. Airline shall not install any object in the Terminal or commence construction of any alterations, additions, or improvements that constitutes a work of visual art under the Visual Artists Rights Act of 1990, as amended ("***VARA***") unless and until Airline has provided the Authority with either (i) written notification that VARA does not apply; or (ii) a written waiver from the author of a work of visual art, in form and substance reasonably satisfactory to the Authority, which identifies specifically the work of visual art and the uses of that work to which the waiver applies in accordance with 17 U.S.C. § 106A(e)(1).

Section 11.03 Security Provided by Airline.

Airline and its Airline Parties shall comply with (i) the provisions of the Authority's TSA-approved airport security plan for the Airport as from time to time existing, and (ii) applicable regulations of the TSA, as from time to time existing.

Section 11.04 Conduct.

Airline and its Airline Parties shall not unreasonably disturb, annoy, or offend others at the Airport. Upon notification by the Authority of any violation of the provisions of this Section 11.04, Airline shall forthwith take all reasonable measures necessary to terminate the unreasonably offensive, disorderly, or improper conduct.

Section 11.05 Performance by the Authority upon Failure by Airline.

The Authority by its authorized officers, employees, agents, contractors, sub-contractors, and other representatives shall have the right, upon oral or written notice to Airline (at such times as may be reasonable under the circumstances and with as little interruption of Airline's operations as is reasonably practicable), to enter upon and in the Leased Premises for the following purposes:

A. Inspection. To inspect such Leased Premises to determine whether Airline has complied and is complying with the terms and conditions of this Agreement, including without limitation, the Authority may inspect for repairs to utilities systems and for any other purpose necessary for or incidental to or connected with the Authority's obligations hereunder, or in the exercise of its governmental functions, or in the Authority's capacity as Airport owner.

B. Maintenance. To perform maintenance and make repairs in any case where Airline is obligated, but has failed to do so, after the Authority has given Airline reasonable notice to do so, Airline shall reimburse the Authority for the cost of such performance plus an administrative fee of ten percent (10%) of the amount expended by the Authority.

Section 11.06 Affiliates.

A. Airline must provide thirty (30) days' written notice to the Authority designating an Air Carrier as an Affiliate via a form provided by the Authority prior to such Air Carrier serving as an Affiliate of the Airline at the Airport. The Air Carrier proposed to be an Affiliate must not be in default to the Authority. Upon written approval by the Authority, the Affiliate shall pay fees, rates and charges as if the Affiliate were a Signatory Airline, without payment of any additional charges or premiums (i) for as long as Airline remains a signatory to this Agreement; and (ii) for as long as the Affiliate remains an Affiliate of Airline. Each Affiliate shall execute an operating agreement with the Authority in a form reasonably acceptable to the Authority prior to such Air Carrier serving as an Affiliate of the Airline at the Airport which will contain, among other provisions, the requirement to pay a Security Deposit to the Authority. Airline may at any time give the Authority thirty (30) days' prior written notice that such Air Carrier otherwise meeting the definition of an Affiliate hereunder shall no longer be considered an Affiliate of Airline for purposes of this Agreement. As a precondition of being approved by the Authority, each Affiliate shall (x) be independently liable for all charges incurred related to its operation at the Airport (in addition to the Signatory Airline's liability stated below), (y) maintain certain minimum levels of insurance coverage, and (z) indemnify and hold the Indemnified Parties harmless of any and all damages incurred as a result of its operations at the Airport as set forth in Article 14 hereof.

B. Airline hereby agrees to and shall guarantee full payment of all fees, rates, rentals, and charges, including PFCs, incurred by or due from an Affiliate of Airline as a result of flights that an Affiliate of Airline operates for and on behalf of Airline at the Airport. Notwithstanding the foregoing, Airline is not responsible for fees, rates, rentals, and charges, including PFCs, applicable to flights operated by an Affiliate of Airline on its own behalf or for any entity other than Airline.

C. Without affecting an Affiliate's obligation to Airline pursuant to a separate agreement between the Airline and its Affiliate or otherwise, Airline shall fully indemnify the Authority for all conduct and omissions of the Affiliate to the fullest extent provided in Section 14.01 of this Agreement.

D. The activities and revenues attributable to the operations of Affiliates at the Airport shall be included in any Majority-In-Interest approval required in (i) Section 9.03; or (ii) any other section hereof and the Affiliate's operations shall be included with the Airline's Enplaned Passengers and landed weight; provided, however, that the Affiliate shall not be considered as a separate Signatory Airline for purposes of MII approvals under this Agreement.

E. The Authority shall not seize any aircraft owned or operated by Airline arising from any default by an Affiliate.

ARTICLE 12
RULES AND REGULATIONS; COMPLIANCE WITH LAWS

Section 12.01 Rules and Regulations.

Airline covenants and agrees to observe and obey (and to require the Airline Parties to observe and obey and to exercise diligent efforts to require its passengers, guests, invitees, and those doing business with Airline, to observe and obey) the Rules and Regulations, as they may from time to time during the Term of this Agreement be promulgated or amended for reasons of safety, health, sanitation, and good order; provided, however, that such Rules and Regulations shall (a) not be inconsistent or interfere with the reasonable exercise by Airline of any right or privilege expressly granted hereunder or under any other agreement between Airline and the Authority relating to the Airport or any part thereof, nor inconsistent with the rules and regulations of any Federal agency having jurisdiction with respect to Airline or its operations, (b) not materially increase Airline's obligations hereunder, and (c) be applied by the Authority in a not unjustly discriminatory manner. With respect to this Agreement, the obligation of Airline to use its diligent efforts to require such observance and obedience on the part of its passengers, guests, invitees, and business visitors shall apply only while such persons are in the Terminal Area and any of Airline's non-Terminal Area leaseholds. Authority agrees it will not promulgate or amend any Rules and Regulations that would have an unreasonably adverse effect on Airline's rights hereunder. In the event of any conflict between requirements of Applicable Law and the

Rules and Regulations, the more restrictive requirement shall apply, as long as compliance with a more restrictive Rule or Regulation does not violate a requirement of any Applicable Law.

Section 12.02 Observance and Compliance with Laws.

Each of Airline and the Authority shall, in connection with its rights and obligations hereunder, observe, and comply with, and pay all taxes and obtain all licenses, permits, certificates, and other authorizations required by all Applicable Laws, including but not limited to all rules, regulations, and directives of the Federal Aviation Administration, as applicable to the Airline or Authority, including without limitation, those requirements of the FAA set forth in **Exhibit H**, as such requirements may be amended by the FAA from time to time. Airline agrees to make part of and incorporate into this Agreement by reference or by setting forth at length, at the option of Authority, any and all Applicable Laws, and assurances and covenants required pursuant thereto, the incorporation of which may now or hereafter be required by the Federal Aviation Administration or other federal agency or by the Commonwealth; provided, however, that nothing herein shall be construed to limit or diminish the right of Airline, at its own cost, risk, and expense, to contest, by appropriate judicial or administrative proceeding, the applicability or the legal or constitutional validity of any such Applicable Law. Notwithstanding anything contained herein or in **Exhibit H** to the contrary, to the extent permitted by Applicable Law, the provisions of Sections B.3 and B.6 of **Exhibit H** shall be applicable with respect to the Leased Premises and, where applicable, for contracts and subcontracts Airline enters into and solicitations Airline issues on and after the Effective Date of the Agreement.

Section 12.03 SEC Rule 15c2-12.

Upon the request of Authority, Airline will provide Authority with such information with respect to Airline as Authority may reasonably request in writing in order for Authority to comply with its continuing disclosure obligations under Securities and Exchange Commission ("***SEC***") Rule 15c2-12, as it may be amended from time to time; provided that Airline may in lieu of providing the requested information direct Authority to an Airline or SEC website where the requested information is then currently available.

ARTICLE 13
DAMAGE TO, DESTRUCTION, CONDEMNATION OR DISPOSITION OF AIRPORT

Section 13.01 Damage to, Destruction or Condemnation of Airport.

If the Airport (other than the ACAA Area and any Special Facilities) or any portion thereof shall be damaged or destroyed or is taken as a result of an eminent domain proceeding, all proceeds of all insurance required by Section 14.02 and all proceeds resulting from eminent domain proceedings shall be applied as provided below.

A. Total or Substantial Taking. During the Term of this Agreement, if the whole or if such a portion of the Airport or the Leased Premises as will materially interfere with the Airline's conduct of its Air Transportation Business is taken, acquired by, or sold to a government 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 the Term of this 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. Airline shall pay all required payments apportioned to the date of such termination and shall promptly vacate the Leased Premises. All sums representing prepaid Airline Fees and Charges, if any, shall be promptly repaid to the Airline, less any amounts then due the Authority.

B. Less than a Total or Substantial Taking. If the taking of the Leased Premises is not of the whole or not of such a portion as will materially interfere with the Airline's conduct of its Air Transportation Business, then the Agreement will expire as to that portion of the Leased Premises taken but shall continue in full force and effect as to that portion of the Leased Premises not taken. All sums representing prepaid Airline Fees and Charges for the portion of the Leased Premises so taken, if any, shall be promptly repaid to the Airline, less any amounts then due the Authority.

C. Damage or Destruction of Premises. If the Terminal or Airline's Leased Premises shall be partially damaged by fire or other casualty, but not rendered untenantable, the same shall be repaired with due diligence by the Authority at its own cost and expense, but only to the extent of the proceeds of insurance received with respect to such Leased Premises, and the Airline Fees and Charges payable hereunder with respect to Airline's Leased Premises shall continue to be paid. If the damage shall be so extensive as to render such Leased Premises untenantable but capable of being repaired in thirty (30) days, the same shall be repaired with due diligence by the Authority at its own cost and expense, but only to the extent of the proceeds of insurance received with respect to such Leased Premises, and the Airline Fees and Charges payable hereunder with respect to Airline's Leased Premises shall continue to be paid up to the time of such damage and shall thenceforth cease until such time as the Leased Premises shall be restored. The Authority shall use commercially reasonable efforts to provide Airline with alternate premises, including use of Common Use Facilities, if available pursuant to Article 4, which shall, to the extent reasonably possible, be comparable in size, type, character, condition and suitability for Airline's operations during such period of repair or reconstruction.

Section 13.02 Untenantable Conditions.

In case the Terminal is completely destroyed by fire or other casualty or so damaged that it will remain untenantable for more than thirty (30) days, or in case it does so remain untenantable for more than thirty (30) days, at the option of Airline either (i) the Terminal shall be repaired or reconstructed with due diligence by the Authority at its own cost and expense, but only to the extent of the proceeds of insurance received with respect to such Leased Premises, and the Airline Fees and Charges payable hereunder with respect to Airline's Leased Premises shall be proportionately paid up to the time of such damage or destruction and shall thenceforth cease until such time as the Leased Premises shall be put in order; or (ii) within sixty (60) days after the time of such damage or destruction and before the said Leased Premises are restored, Airline shall give the Authority notice of its intention to cancel this Agreement, in which case this Agreement shall forthwith cease and determine. If the Leased Premises occupied or used by Airline hereunder, or any portion thereof, are damaged or destroyed and thereby rendered untenantable, the Authority shall use diligent efforts to provide Airline with alternate premises, including the Common Use Facilities, if available pursuant to Article 4, which shall, to the extent reasonably possible, be comparable in convenience, size, type, character, condition, and suitability for Airline's operations, during such period of repair or reconstruction. Except to the extent the Authority provides Airline with such alternative Leased Premises, Airline shall not be obligated to pay

Airline Fees and Charges for such untenantable portion during such time as it remains untenantable. In no event shall Airline be required to pay Airline Fees and Charges with respect to such alternative premises which are in excess of those that would have been payable for the premises which were rendered untenantable; provided, however, that if Airline elects to take space in excess of the premises which were rendered untenantable, Airline shall be required to pay Airline Fees and Charges with respect to such excess space; and provided, further, that there shall be no abatement or reduction of Airline Fees and Charges where the untenantable condition is caused by the willful misconduct or negligent act or omission of Airline, or its Airline Parties, except to the extent of proceeds of business interruption or other similar insurance received with respect to such damage or destruction.

Section 13.03 Proceeds of Award or Settlement.

The Authority shall deposit the proceeds of any court or arbitration award or settlement in lieu thereof with respect to the Airport (other than any Special Facilities) received by the Authority as follows: (i) if and to the extent such proceeds arise as a result of the Authority's ownership, operation, use or maintenance of any of the Airfield Area or Terminal, such proceeds shall be deposited into the appropriate fund under the Indenture; and (ii) If and to the extent such proceeds arise as a result of the Authority's ownership, operation, use or maintenance of the ACAA Area, into the Airport System Capital Fund.

ARTICLE 14
INDEMNIFICATION AND INSURANCE

Section 14.01 Indemnification.

A. Airline shall defend, indemnify, and hold harmless the Indemnified Parties from and against any and all losses, liabilities, costs, suits, claims, judgments, expenses, fines, or demands of any kind (including, but not limited to, costs of investigation, reasonable attorney's fees, court costs, and expert fees) of any nature whatsoever (each a "***Loss***" and collectively, "***Losses***"), arising out of or alleged to arise out of the use by, occupancy of, or operations of Airline or any Airline Party on the Leased Premises or any acts or omissions of Airline in connection with this Agreement, except to the extent any such Loss is caused by the willful misconduct or negligent act or omission of the Authority or any other Indemnified Party, or the negligent act or omission or willful misconduct of any other Air Carrier using the Airport, or its respective directors, officials, officers, agents, employees, licensees (other than Airline), contractors, or subcontractors. Notwithstanding any of the foregoing provisions of this Section 14.01(A), Airline's obligations under this Section 14.01 shall not extend to any amounts payable by the Authority as a result of claims, actions, proceedings, or suits alleging a taking of property or interests in property without just compensation, trespass, nuisance, property damage, personal injury, or similar claims, actions, proceedings, or suits based upon the environmental impacts resulting from the use of the Airport for the landing and taking off of aircraft, all of which shall be treated as part of the Costs and shall be allocated to the Airfield Area. Airline shall have no responsibility for any such amounts beyond its responsibility to pay its Airline Fees and Charges.

B. Airline agrees to defend, indemnify, and hold harmless the Indemnified Parties from and against any and all claims or liability for compensation under any workers' compensation statute arising out of injuries sustained by any employee of Airline, except to the extent caused by the willful misconduct or negligent act or omission of the Authority or its officers, officials or employees, or the negligent act or omission or willful misconduct of any other Air Carrier using the Airport, or its directors, officials, officers, agents, employees, licensees (other than Airline), contractors or subcontractors. However, nothing in this Section 14.01(B) is intended or shall be construed to obligate Airline to defend, indemnify, or hold harmless from or against any claim or liability under any workers' compensation statute arising out of any injury sustained by any employee of the Authority in the course of her or his employment. Airline covenants that it shall require its licensees, contractors, and subcontractors to maintain in effect at all times workers' compensation insurance as required by law.

C. Subject to the provisions of Section 6.07(F), Airline agrees to indemnify the Authority from, and to assume all liability for, and to pay, all taxes and assessments, including such taxes and assessments as may from time to time be imposed by the Authority, for payment of which the Authority may become liable and which by Applicable Law may be levied or assessed on the Leased Premises occupied by Airline pursuant to this Agreement, or which arise out of the operations of Airline or by reason of Airline's occupancy of its Leased Premises. Airline may, at its own risk, cost, and expense, and at no cost to the Authority, contest, by appropriate judicial or administrative proceedings, the applicability or the legal or constitutional validity of any such tax or assessment. Airline shall be responsible for obtaining bills for all of said taxes and assessments directly from the taxing authority and shall promptly deliver to the CEO copies of receipts of payment.

D. The Authority shall promptly notify the Chairman of the PIT Airport Affairs Committee of each claim, action, proceeding, or suit arising on or after the Effective Date as a result of the Authority's ownership, operation, and maintenance of the Airport, setting forth the particulars of such claim, action, proceeding, or suit and shall, subject to the maintenance of appropriate privileges, including without limitation attorney-client privilege, furnish such Chairman with a copy of all judicial filings and legal process and any correspondence received by the Authority related thereto. The Signatory Airlines, acting through the PIT Airport Affairs Committee and at their own cost and expense, shall have the right to employ separate legal counsel, which legal counsel shall, subject to the maintenance of appropriate privileges, including without limitation attorney-client privilege, be invited by the Authority to attend and participate in all meetings (including those related to settlement) and to appear and participate in all judicial proceedings related to such claim, action, proceeding, or suit.

E. Without limiting the generality of any other provision hereof, Airline shall reimburse the Authority for the cost of any and all reasonable outside attorney's fees and investigation expenses incurred by the Authority in the defense and handling of said suits and claims and in enforcing the provisions of this Agreement.

Section 14.02 Insurance.

A. Airline shall, at its own cost and expense, maintain in effect the following insurance coverage at all times during the term of this Agreement and, prior to or contemporaneously with the Commencement Date, shall deliver to the CEO certificates of insurance, on the industry standard form (ACORD 25) or other form acceptable to the Authority, issued by a company or companies possessing a rating of A- VII or higher from the A.M. Best Company or an equivalent rating service and qualified to pay claims within the Commonwealth evidencing the following coverage:

1. Comprehensive/Airline liability insurance subject to a limit of liability of not less than Two Hundred Million Dollars ($200,000,000) per occurrence and in the aggregate, (One Hundred Million Dollars ($100,000,000) per occurrence and in the aggregate for Air Carriers that only operate aircraft with 35 seats or fewer), as adjusted pursuant to the provisions of this Section 14.02; provided, however, that the sublimit for Personal Injury Coverage for non-passengers and for advertising injury liability shall be Twenty-Five Million Dollars ($25,000,000) each occurrence and in the annual aggregate, and the sublimit for Fire Legal Liability shall be Ten Million Dollars ($10,000,000). Coverage shall include, without limitation, Bodily Injury and Property Damage to Third Parties, Aircraft Liability, Contractual Liability, Products-Completed Operations, Personal Injury, Advertising Injury Liability, Terminal-Operations, Independent Contractors, and Fire Legal Liability. The Products-Completed Operations coverage shall be provided for a minimum of two years following final acceptance of the work except in the case of construction, in which case the coverage shall be provided for a minimum of five years following final acceptance of the work. Such policy or policies shall, to the degree reasonably possible, be issued on an occurrence basis, and shall cover Airline's operations at the entire Airport and all on-Airport vehicles and mobile equipment, and all activities of Airline at the Airport and all indemnifications made in this Agreement. The Authority and the other Indemnified Parties shall be named as additional insureds to the extent of Airline's indemnification obligations set forth in Section 14.01.

2. Comprehensive auto liability insurance written on a form providing coverage at least as broad as the ISO CA 00 01 covering owned, hired, and non-owned vehicles used and operated by Airline against bodily injury and property damage claims, subject to a limit of liability of not less than Five Million Dollars ($5,000,000) (Ten Million Dollars ($10,000,000) for vehicles with airside access) per occurrence and in the aggregate, as adjusted pursuant to the provisions of this Section 14.02. The Authority and the Indemnified Parties shall be named as additional insureds to the extent of Airline's indemnification obligations set forth in Section 14.01.

3. Workers' compensation insurance as required by law and employer's liability insurance with a limit of liability of not less than One Million Dollars ($1,000,000).

4. To the extent not otherwise covered by Airline's Comprehensive/Airline liability policy, commercial general liability insurance covering premises operations, broad form contractual liability, personal liability (with employee exclusion deleted), and broad form property damage against bodily injury and property damage claims subject to a limit of liability not less than a combined single limit of Twenty-Five Million Dollars ($25,000,000) per occurrence and in the aggregate, as adjusted pursuant to the provisions of this Section 14.02. The Authority and the Indemnified Parties shall be named as additional insureds to the extent of Airline's indemnification obligations set forth in Section 14.01.

Each of the aforementioned certificates shall provide that such policies shall be primary to any other policies of insurance maintained by the Authority (except with respect to Workers' Compensation/Employer's Liability policies) and shall provide that such policies cannot be canceled or changed in any manner that may adversely affect the Authority, except after the issuing company has provided thirty (30) days' prior written notice to the CEO. Airline shall advise the Authority of any notice of cancellation, non-renewal, or material change in any policy within ten (10) days of notification of such action, provided that Airline shall provide notice within five (5) days for non-payment of premium. Any and all deductibles in the insurance policies described above shall be assumed by and be for the account of, and at the sole risk of, Airline. The workers' compensation insurance requirement of Section 14.02(A)(3) may be satisfied by self-insurance evidenced by a certificate of self-insurance that complies with the requirements of the Applicable Laws of the Commonwealth. Airline shall deliver to the CEO, on or before the date of the renewal of any policy of insurance required hereunder, a renewal certificate that shall conform to the requirements set forth in this Section for the original certificates.

B. The Authority shall maintain or cause to be maintained in effect at all times during the term of this Agreement the following coverage:

1. Property insurance including boiler and machinery covering the Airport (excluding the ACAA Area) for all-risk coverage in an amount equal to the replacement cost thereof. However, the Authority shall not be obligated to insure any of the cargo or other property of Airline or of any other person or persons which is or may be at any time located in, on, or about the Leased Premises.

2. Airport liability insurance providing commercial general liability coverage, blanket contractual liability, personal injury liability (with employee exclusion deleted), on-premises automobile including owned, non-owned, and hired automobiles used and operated by the Authority, against bodily injury and property damage arising out of the existence or operation of the Airport (except the ACAA Area) subject to a limit of liability of not less than Two Hundred Million Dollars ($200,000,000).

C. The Authority shall upon request of a Majority-in-Interest, purchase policies of insurance which are additional, in scope or amount of coverage, to those policies described in this Article 14. The Authority shall furnish to the Chair of the PIT Airport Affairs Committee copies of any cancellation notices received by the Authority with respect to any coverages referenced in this Article 14. In no event shall the Authority maintain deductibles in the insurance policies described in this Article 14 in an amount in excess of Two Million Dollars ($2,000,000) in the aggregate without the prior written recommendation of an independent risk consultant. None of the insurance requirements specified above, except as otherwise provided herein, may be satisfied by self-insurance except with the written recommendation of an independent risk consultant.

D. Notwithstanding anything contained in this Section 14.02 to the contrary, the CEO may, upon the recommendation of the Authority's independent risk consultant, increase, or may in her or his discretion and upon the recommendation of the Authority's independent risk consultant, waive or decrease, any of the specific insurance requirements set forth in this Section

14.02 by written notice to Airline. Failure by Airline to take out or maintain, or the taking out or maintenance of, any insurance required hereunder, shall not relieve Airline from any liability under this Agreement, nor shall the insurance requirements hereof be construed to conflict with or otherwise limit any contractual obligations, including those of indemnification, of Airline contained herein. Further, should any Governmental Authority require or modify insurance requirements to amounts greater than those set by the Authority, it shall be Airline's responsibility to obtain such coverage as may be required without notification from the Authority. Airline may use commercial umbrella/excess liability insurance so that Airline has the flexibility to select the best combination of primary and excess limits to meet the total insurance limits required by this Agreement.

E. Notwithstanding the above, Airline and the Authority agree to review the insurance requirements of this Agreement at least every five (5) years and to make any revisions deemed reasonable and necessary by the Authority and recommended by the Authority's independent risk consultant.

F. The All Risk and fire and extended property coverage required of Airline hereunder with respect to the Airport or any portion thereof shall contain a waiver of subrogation provision to waive all rights of recovery under subrogation or otherwise against the Authority. All of the policies required of Airline shall be primary and Airline agrees that any insurance maintained by the Authority shall be non-contributing with respect to Airline's insurance.

G. Airline shall not do or permit to be done anything, either by act or failure to act, which shall cause cancellation of any policy of property insurance for its Leased Premises or any part thereof. Further, if Airline shall do or permit to be done anything, either by act or failure to act, that shall cause an increase in the premiums for property insurance for such Leased Premises, Airline shall either pay the amount of such increase, pursuant to invoices from the Authority, or purchase additional insurance for the Authority with terms satisfactory to the Authority.

H. The Authority shall not enter into any agreement with any third party which would prejudice the subrogation of Airline or its insurers against such third party.

ARTICLE 15
TERMINATION AND DEFAULT UNDER AGREEMENT

Section 15.01 Termination by the Authority.

A. If any one or more of the following shall occur, then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Authority may, at its option, immediately and without notice, terminate this Agreement and the licenses and other rights of Airline hereunder or exercise any other right granted under this Agreement to the Authority:

1. Airline shall become insolvent (as such term is defined under Section 101 of the Federal Bankruptcy Code, 11 U.S.C. 101, *et seq*. (the "***Bankruptcy Code***"), or any successor statute thereto); or shall fail to pay its debts generally as they mature; or shall take the benefit of any present or future federal or state insolvency statute; or shall make a general

assignment for the benefit of creditors, or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement of its indebtedness under the Bankruptcy Code or under any other law or statute of the United States or of any state thereof, or consent to the appointment of a receiver, trustee, custodian, liquidator or other similar official, of all or substantially all of its property; or an order for relief shall be entered by or against Airline under any chapter of the Bankruptcy Code;

2. by order or decree of a court, Airline shall be adjudged a debtor or bankrupt or an order shall be made approving a petition filed by any of its creditors or by any of its stockholders, seeking its reorganization or the readjustment of its indebtedness under the Bankruptcy Code or under any other law or statute of the United States or any state thereof and such order or decree shall not be stayed or vacated within sixty (60) days of its issuance;

3. a petition under any chapter of the Bankruptcy Code or an action under any federal or state insolvency law or statute shall be filed against Airline and shall not be dismissed or stayed within sixty (60) days after the filing thereof;

4. by or pursuant to, or under authority of, any legislative act, resolution, or rule, or any order or decree of any Governmental Authority, a receiver, trustee, custodian, liquidator, or other similar official shall take possession or control of all or substantially all of the property of Airline and such possession or control shall continue in effect for a period of sixty (60) days;

5. Airline shall become a corporation in dissolution;

6. the rights of Airline hereunder shall be transferred to, pass to, or devolve upon, by operation of law or otherwise, any other person, firm, corporation, or other entity by, in connection with, or as a result of any bankruptcy, insolvency, trusteeship, liquidation or other proceedings or occurrence described in Subparagraphs 1 through 5 of this Paragraph A; or

7. Airline shall voluntarily discontinue Air Transportation Business at the Airport for a period of ninety (90) consecutive days or for a period of one hundred twenty (120) days whenever occurring in any Fiscal Year or, after exhausting or abandoning any further appeals, Airline shall be prevented for a period of ninety (90) consecutive days by action of any Governmental Authority other than the Authority from conducting its Air Transportation Business at the Airport, except with respect to any such action by a Governmental Authority affecting Air Carriers generally at the Airport.

B. If Airline shall become a merged corporation in a merger or a constituent corporation in a consolidation which is permitted pursuant to Section 17.14, such merger or consolidation shall not be grounds for termination of Airline's rights hereunder. If Airline shall become a merged corporation in a merger or a constituent corporation in a consolidation which is prohibited pursuant to Section 17.14, the Authority may, at its option, terminate this Agreement or exercise any other right granted under this Agreement to the Authority upon thirty (30) days prior written notice in accordance with Section 17.10.

C. If Airline shall fail to duly and punctually pay any Airline Fees and Charges or PFCs required to be paid hereunder or shall fail to make payment when due of any other sum required to be paid to the Authority pursuant to this Agreement, then the Authority may, if such default is not cured within ten (10) days after Airline's receipt of written notice thereof with respect to the non-payment of Airline Fees and Charges, and thirty (30) days with respect to the non-payment of any other fee or charge, at the Authority's option, terminate this Agreement or exercise any other right granted under this Agreement to the Authority, by sending written notice of termination in accordance with Section 17.10.

D. If any one or more of the following shall occur, then upon the occurrence of any such event or at any time thereafter during the continuance thereof, the Authority may, at its option, terminate this Agreement or exercise any other right granted under this Agreement to the Authority by sending written notice of termination in accordance with Section 17.10:

1. a lien which exceeds Ten Thousand Dollars ($10,000), or liens which in the aggregate exceed Twenty-Five Thousand Dollars ($25,000) (as each such dollar amount is adjusted pursuant to the provisions of Section 7.06), shall be filed against the Leased Premises or any portion thereof because of any act or omission of Airline, and shall not be discharged or bonded over within thirty (30) days after receipt of notice or other knowledge thereof by Airline, unless Airline shall within the aforesaid thirty (30) days after receipt of notice or other knowledge thereof by Airline furnish to the Authority security in the amount of one hundred fifty percent (150%) of such lien or liens to protect the interests of the Authority and diligently proceed to contest such lien or liens; or

2. Airline shall fail to maintain the insurance coverages required under this Agreement or Airline's authority to operate as an Air Carrier at the Airport shall be suspended or revoked for any reason; or

3. Airline shall fail to keep, perform, and observe any other promise, covenant, or other provision of this Agreement or any other agreement between the Authority and the Airline for a period of thirty (30) days after written notice specifying such failure is given to Airline by the Authority; provided, however, that any such failure which can be remedied, but which cannot with due diligence be remedied within such thirty (30) day period, shall not give rise to the Authority's right to terminate this Agreement if corrective action is instituted by Airline within the applicable period and diligently pursued until the failure is remedied.

E. Notwithstanding any other provision in this Agreement, Airline agrees that upon any Event of Default (beyond any applicable notice and cure period granted hereunder), the Authority may:

1. Upon five (5) days' prior written notice (except for any Event of Default under Section 15.01(D)(2), which shall not require any advance written notice), (i) terminate Airline's right to possession of the Leased Premises or any part thereof and/or (ii) terminate this Agreement, and thereafter in either case, with or without legal process, take possession of the Leased Premises and remove Airline, any occupant and any property therefrom, using such force as may be necessary, without being guilty of trespass and without relinquishing any rights of the Authority against Airline.

2. Recover damages from Airline in an amount equal to the amount herein covenanted to be paid as Airline Fees and Charges, together with all reasonable expenses of any proceedings (including, but not limited to, any commissions paid to any real estate agent, attorney's fees, advertising expense, and the cost of such alterations, repairs, replacements, and decoration or re-decoration as Authority in its sole judgment considers advisable and necessary for the purpose of re-renting the Leased Premises); provided, however, that there shall be credited against the amount of such damages amounts received by the Authority from re-renting the Leased Premises for the remainder of the Term. Authority shall use commercially reasonable efforts to re-rent the Leased Premises but in no event shall be liable in any way whatsoever for failure to so re-rent the Leased Premises or, in the event that the Leased Premises are re-rented, for failure after reasonable efforts to collect the rent thereof under such re-renting.

3. No act or thing done by Authority shall be deemed to be an acceptance of a surrender of the Leased Premises unless Authority shall execute a written agreement of surrender with Airline. Airline's liability hereunder shall not be terminated by the execution of a new lease of the Leased Premises by Authority.

4. Airline agrees to pay to Authority, upon demand, the amount of damages herein provided after the amount of such damages shall have been ascertained; provided, however, that any expenses incurred by Authority in enforcing its rights under this Agreement shall be deemed to be a part of the damages for the month in which they were incurred. Separate actions may be taken each month or at other times by Authority against Airline to recover the damages then due, without waiting until the end of the Term of this Agreement to determine the aggregate amount of such damages.

5. Airline hereby expressly waives any and all right of redemption granted by or under present or future laws in the event of Airline being evicted or being dispossessed for any cause in accordance to the provisions of this Agreement, or in the event of Authority obtaining possession of the Leased Premises by reason of the violation by Airline of any of the covenants and conditions of this Agreement.

6. Without waiving any default and without terminating this Agreement, pay any sum required to be paid by the Airline to parties other than the Authority and which Airline has failed to pay, and perform any obligations required to be performed by the Airline, in each case as required under this Agreement, and any amounts so paid or expended by the Authority in fulfilling the obligation of the Airline hereunder shall be repaid by the Airline to the Authority on demand together with interest thereon at the rate of fifteen percent (15%) per annum from the date of such payment or expenditure.

7. Bring suit for the collection of amounts due for which Airline may be in default or for the performance of any other covenant, promise, or agreement of Airline for performance or damage therefor, all without terminating this Agreement.

8. Assess Airline at the rate of one and one-half percent (1.5%) per month or, if less, the highest rate permitted under Applicable Law on any and all fees and amounts

not paid to the Authority when due, in accordance with this Agreement, until such fees or amounts are paid.

9. Without terminating this Agreement, exclude Airline from its Leased Premises and use diligent efforts to lease such Leased Premises to another Air Carrier for the account of Airline, holding Airline liable for all Airline Fees and Charges and other payments due hereunder up to the effective date of such leasing and for the excess, if any, of the Airline Fees and Charges and other amounts payable by Airline under this Agreement for the remainder of the Term of this Agreement over the rentals and other amounts which are paid by such new Air Carrier under such new agreement.

10. From time to time, take whatever action at law or in equity appears necessary or desirable to collect Airline Fees and Charges and any other amounts payable by Airline hereunder then due and thereafter to become due, and to enforce the performance and observance of any obligation, agreement, or covenant of Airline under this Agreement.

F. It is understood and agreed that the remedies set forth in this Section 15.01, shall be in addition to all other remedies which are or may be available to the Authority at law or in equity.

G. All of the Authority's remedies shall be cumulative and concurrent. No termination of this Agreement or the taking or recovering of the Leased Premises or any part thereof shall deprive the Authority of any of the Authority's remedies or actions against Airline for unpaid Airline Fees and Charges and for damages or for the breach of any covenant herein contained, nor shall the bringing of any action for Airline Fees and Charges or breach of covenant or the resort to any other remedy herein provided for the recovery of Airline Fees and Charges be construed as a waiver of the right to obtain possession of the Leased Premises.

Section 15.02 Termination by Airline.

If Airline is not in default in the payment of any amount due to the Authority hereunder, Airline may terminate this Agreement prior to the Scheduled Expiration Date set forth in Section 5.01 and its obligations hereunder by giving the Authority thirty (30) days' written notice by registered or certified mail upon or after the happening and during the continuance of any of the following events:

A. any failure by the Authority to keep, perform, and observe any material promise, covenant, or other provision of this Agreement for a period of thirty (30) days after written notice specifying such failure and requesting that it be remedied is given to the Authority by Airline; provided, however, that any such failure which can be cured, but which cannot with due diligence be cured within such thirty (30) day period, shall not give rise to Airline's right to terminate this Agreement if corrective action is instituted by the Authority within the applicable period and diligently pursued until the failure is corrected; or

B. Airline is prevented from conducting its Air Transportation Business at the Airport for a period of one hundred twenty (120) consecutive days for any reason other than its own fault.

Section 15.03 No Waiver.

A failure by either party to this Agreement to take any action with respect to any default or violation by the other party of any of the terms, covenants, or conditions of this Agreement shall not in any respect limit, prejudice, diminish, or constitute a waiver of any rights of the non-defaulting party to act with respect to any prior, contemporaneous, or subsequent violation or default or with respect to any continuation or repetition of the original violation or default. The acceptance by the Authority of payment for any period or periods after a default or violation of any of the terms, conditions, and covenants of this Agreement shall not constitute a waiver or diminution of, nor create any limitation upon any right of the Authority pursuant to this Agreement to terminate this Agreement for subsequent violation or default, or for continuation or repetition of the original violation or default.

Section 15.04 Agreement to Pay Attorneys' Fees and Expenses.

In the event Airline defaults under this Agreement and the Authority employs attorneys or incurs other expenses for the collection of Airline Fees and Charges or any other amounts due hereunder, or the enforcement or performance or observance of any obligation or agreement on the part of Airline herein contained, Airline shall, on demand, pay to the Authority the reasonable fees and expenses of such attorneys and such other reasonable expenses so incurred by the Authority.

ARTICLE 16
ASSIGNMENT OR SUBLEASE

Section 16.01 Assignment and Sublease by Airline.

A. Except as otherwise provided in this Agreement, Airline shall not assign, sublease, transfer, convey, sell, mortgage, pledge or encumber (hereinafter, collectively, each an "***Assignment***") this Agreement or the Leased Premises without the prior written approval of the CEO. Notwithstanding the foregoing, so long as the Authority has approved a Handling Agreement, Airline may allow the use of the Leased Premises through such Handling Agreement by any other entity conducting an Air Transportation Business or holding a valid permit issued by the Authority to provide such services, provided that Airline remains primarily liable hereunder and provides notice of such use to the Authority. Neither this Agreement nor any interest hereunder shall be assignable or transferable by operation of law or by any process or proceeding of any court or otherwise without the prior written consent of the CEO, except as provided in Section 17.14. If Airline fails to obtain the prior written approval of the CEO to any Assignment, the Authority, in addition to any other rights and remedies set forth herein, shall have the right to refuse to recognize the agreement and the assignee conducting an Air Transportation Business shall acquire no interest in this Agreement or any rights to use the Leased Premises. This Section is not intended to prevent the Assignment of this Agreement to an Affiliate of Airline if such Affiliate conducts an Air Transportation Business at the Airport and expressly assumes in writing all rights and obligations of Airline hereunder as provided in Section 17.14. The Authority's consent shall not be required so long as the Airline provides advance written notice that an Assignment of this Agreement will be for benefit of an entity with which the Airline may merge or consolidate, or which may succeed to a controlling interest in the business of the Airline or which shall purchase all or substantially all of the assets of the Airline as long as such successor is a FAA-certificated Air Carrier. Any and all requests by Airline for an Assignment shall be made in writing by certified mail to the CEO and shall include copies of the proposed documents of Assignment. Said documents of Assignment shall completely disclose any and all monetary consideration paid to Airline for said Assignment. Airline shall reimburse the Authority for all reasonable costs and expenses incurred by the Authority in connection with the review and approval of any such Assignment. If approved, Airline shall submit a fully executed copy of such agreement, which shall be substantially in the form approved by the Authority, to Authority within ten (10) days after the commencement of the Assignment.

B. The Authority will not unreasonably withhold, delay, or condition its approval of Assignments (excluding Handling Agreements) which require its consent but Airline agrees that reasonable circumstances for the Authority to disapprove or condition an Assignment (excluding Handling Agreements) include, but are not limited to, the following:

1. If the Authority determines that there is adequate space for lease directly from the Authority.

2. If Airline has failed to accommodate an Air Carrier on reasonable terms (including fees) prescribed by the Authority in accordance with Section 4.03 hereof.

3. If the assignee or sublessee is not, and is not willing to become, a Signatory Airline.

4. If the Authority determines, in its reasonable discretion, that the proposed assignee or sublessee is not substantially as creditworthy as the Airline.

5. If such proposed assignee is not a Signatory Airline and a Signatory Airline is, in the determination of the Authority, in need of the Leased Premises proposed to be assigned or subleased; provided that the Signatory Airline is willing to take such Leased Premises on substantially the same terms and conditions as proposed in the Assignment.

C. In the event of any approved Assignment of the Leased Premises, Airline shall remain fully and primarily liable during the Term of this Agreement for the payment of all of the Airline Fees and Charges due and payable to the Authority for the Leased Premises and performance of all other obligations hereunder.

Section 16.02 <u>Assignment by the Authority.</u>

The Authority may pledge some or all of the revenues and receipts under this Agreement as security for payment of the principal of, premium, if any, and interest on, obligations issued pursuant to the Indenture. The Authority shall not transfer all of the Airport nor assign this

Agreement to any person or entity unless such person or entity expressly assumes in writing all of the Authority's obligations hereunder.

ARTICLE 17
GENERAL PROVISIONS

Section 17.01 <u>Authority's Right of Entry; Temporary Relocation.</u>

A. Upon reasonable notice, during Airline's normal business hours, the Authority shall have the right to enter Airline's Leased Premises to perform any of the Authority's obligations under this Agreement, exercise any of its rights under this Agreement or in the exercise of its governmental functions, or in the event of any alteration, improvement, or construction on, adjacent to, or in the vicinity of Airline's Leased Premises, for purposes related thereto; provided, however, that the Authority in exercising such right shall not unreasonably interfere with Airline's Air Transportation Business. Notwithstanding the foregoing limitations, in an emergency, the Authority shall have the absolute right to enter Airline's Leased Premises to perform or exercise any of the aforementioned obligations or rights; provided, however, that the Authority in its exercise of such right of entry shall not unreasonably interfere with Airline's Air Transportation Business.

B. In addition to those rights reserved by the Authority in Section 17.01(A) above, the Authority reserves the right from time to time as may be reasonably necessary to close, relocate, reconstruct, change, alter, or modify Airline's Leased Premises for purposes of maintaining or constructing improvements, modifications, or expansions to the Airport, including, but not limited to, the Project, provided that:

1. at least thirty (30) days' written notice (except in an emergency) of any such action is given by the Authority to Airline; and

2. the Authority shall use commercially reasonable efforts to make reasonably convenient and equivalent alternative premises and adequate means of ingress and egress thereto available to Airline; and

3. the Authority complies with the provisions of Section 17.01(C) below.

C. Airline shall continue to pay Terminal Rentals with respect to its Leased Premises during any such temporary relocation (adjusted for any decrease in square footage); provided, however, that the Authority shall reimburse Airline for the actual and reasonable costs associated with any necessary relocation and all additional expenses reasonably incurred by Airline as a result thereof. Any such reimbursed costs and expenses shall be deemed to be a cost of such improvement, modification, or expansion project and shall be allocated to the Terminal Cost Center and included in the calculation of Airline Fees and Charges; provided, however, that any such costs or expenses as a result of the construction of Special Facilities shall be allocated as a cost of such Special Facilities. Such additional costs and expenses shall include, but not be limited to, the costs of any necessary additional security services and the costs associated with any additional employees required to perform the functions of automated equipment which is made unavailable to Airline as a result of the Authority's actions taken pursuant to Section 17.01(B) and (C).

Section 17.02 Quiet Enjoyment.

The Authority agrees that on payment of the Airline Fees and Charges as herein required and subject to performance and compliance by Airline of the covenants, conditions, and agreements on the part of Airline to be performed and complied with hereunder, Airline shall peaceably have and enjoy the Leased Premises and all the rights, licenses, privileges, appurtenances, and facilities granted herein.

Section 17.03 Surrender.

Airline covenants and agrees to yield and deliver peaceably to the Authority possession of the Leased Premises on the Expiration Date or earlier termination hereof, whether such cessation be by termination, expiration, or otherwise, promptly and in substantially the same condition as at the commencement of the Term or, if improved, in substantially the same condition as of the completion date of the last improvement made by Airline or the Authority to the Leased Premises, in each case excepting reasonable wear and tear and fire and casualty damage to the extent not required to be insured by Airline and conditions directly or indirectly caused by the negligence or willful misconduct of the Authority or its agents or employees.

Section 17.04 Force Majeure.

A. Neither Authority nor Airline shall be deemed in violation of this Agreement if it is prevented from performing any of its obligations hereunder by reason of strikes, boycotts, labor disputes, embargoes, shortage of material, acts of God, acts of the public enemy, acts of governmental authority, weather conditions, riots, rebellion, sabotage, terrorism, pandemic, epidemic, declaration of a state of emergency by a Federal or State Governmental Authority, or any other circumstances for which it is not responsible or which is not within its control; provided, however, that nothing in this Section is intended or shall be construed to abate, postpone, or in any respect diminish Airline’s obligations to make any payments due to the Authority pursuant to this Agreement.

B. The Authority shall be under no obligation to supply any service if and to the extent and during any period that the supplying of any such service or the use of any component necessary therefor shall be prohibited, restricted, or rationed by any Governmental Authority or Applicable Law.

Section 17.05 FAA Requirements.

Airline shall comply with the applicable requirements of the FAA set forth in **Exhibit H** hereto, as such requirements may be amended or interpreted by the FAA from time to time.

Section 17.06 No Partnership or Agency.

It is understood and agreed that nothing contained in this Agreement is intended or shall be construed to in any respect create or establish the relationship of partners between the parties hereto, or as constituting Airline as the general representative or agent of the Authority for any purpose whatsoever.

Section 17.07 Conflict of Interest.

No official, director, officer, agent, or employee of the Authority may have any concession or privilege, or any direct or indirect interest or connection with any concession, privilege, license, or right pertaining in any way to the Airport System without approval of the Board members (excluding any interested director) of the Authority voting to approve such concession or privilege. Ownership of stock in a publicly-held corporation shall not be considered a violation of this Section 17.07.

Section 17.08 No Personal Liability.

No official, director, officer, agent, or employee of either party shall be charged personally or held contractually liable by or to the other party under any term or provision of this Agreement or because of any breach thereof or because of its or their execution, approval, or attempted execution of this Agreement.

Section 17.09 Authority Books and Records.

The Authority shall follow such procedures and keep and maintain such books, records, and accounts as may be necessary or appropriate to comply with the terms of this Agreement or the Indenture. Such books, records, and accounts shall, at a minimum, contain all items affecting the computation of Airline Fees and Charges and the Concession Incentive Fee. Airline shall have the right, during normal business hours, upon reasonable notice, in the company of an officer or employee of the Authority and at its own expense, to examine, make copies of and take extracts from such books, records and accounts, but only as necessary to ensure compliance by the Authority with the terms of this Agreement.

Section 17.10 Notices.

Except as otherwise expressly provided hereunder, all notices and other communications provided for under this Agreement shall be in writing and shall be mailed by certified mail, return receipt requested, sent by recognized overnight courier, or telecopied or sent by electronic mail, or personally delivered to the Authority and Airline at the following addresses:

If to the Authority, to:

Chief Executive Officer
The Allegheny County Airport Authority
Pittsburgh International Airport
Landside Terminal - Suite 4000
1000 Airport Boulevard
Pittsburgh, PA 15231

If to Airline, to:

or to such other person or address as either the Authority or Airline may hereafter designate by notice to the other in accordance with this Section. Except as otherwise expressly provided hereunder, any notice or communication under this Agreement shall be deemed to have been given or made: (i) if a messenger or courier service is used, when delivered to the addressee; (ii) if sent by registered or certified mail, five (5) days after being deposited in the mail, postage prepaid and properly addressed; and (iii) if sent by telecopy or electronic mail, the earlier of (x) actual receipt by addressee and (y) twenty-four (24) hours after confirmation of transmission.

Section 17.11 Entire Agreement.

This Agreement, including the attached exhibits and endorsements, embodies the entire agreement between the Authority and Airline relating to the subject matter hereof, and supersedes all prior agreements and understandings, written or oral, express or implied, between the Authority and Airline relating thereto. This Agreement, including the attached exhibits and endorsements, may not be changed, modified, discharged, or extended except by written amendment duly executed by both of the parties.

Section 17.12 Applicable Law.

This Agreement shall be deemed to have been made in and shall be construed in accordance with, the laws of the Commonwealth.

Section 17.13 Covenant Not to Grant More Favorable Terms.

The Authority agrees that it will not charge a more favorable rental, fee, or charge to any other Air Carrier providing similar services at the Airport and executing an agreement with the Authority for comparable space, facilities, or rights at the Airport than that being paid by Airline hereunder, unless the Authority also makes those more favorable terms available to Airline. The provisions of this Section do not apply to the rental rate on ground space at the Airport. Notwithstanding the foregoing, so long as the Authority complies with all Applicable Laws related thereto, nothing in this Section 17.13 shall be construed to apply to (i) any promotional fee waiver agreement offered by the Authority pursuant to the FAA's Policy and Procedures Concerning the Use of Airport Revenue, Fed. Register Vol. 64, No. 30, February 16, 1999 and the Air Carrier Incentive Program Guidebook, as each may be amended or altered from time to time, or (ii) to any Economic Development Distribution Program utilizing non-Airport revenues to support the promotion of additional air service; provided that any such program is available to all Air Carriers which are eligible under the Authority's promotional fee waiver policy.

Section 17.14 Airline Mergers and Consolidations.

In the event Airline consolidates with or merges into another corporation or permits one or more other corporations to consolidate with or merge into it, or transfers or conveys all or substantially all of its property, assets and licenses to another corporation or other entity (each of the foregoing a "***Change in Control***"), the corporation or entity resulting from such merger or consolidation (if such corporation or entity surviving such merger or other consolidation is not Airline) or the corporation or other entity to which such transfer or conveyance is made shall: (i) assume in writing and agree to perform all of Airline's obligations hereunder; (ii) be qualified to do business in the Commonwealth; (iii) demonstrate to the reasonable satisfaction of the CEO the financial resources necessary to continue to operate at the Airport in substantially the same (or better) manner as Airline prior to such Change in Control; and (iv) if such corporation or other entity shall not be organized and existing under the laws of the United States of America or any state or territory thereof or the District of Columbia, furnish to the Authority an irrevocable consent to service of process in, and to the jurisdiction of the courts of, the Commonwealth with respect to any action or suit, in law or equity, brought by the Authority to enforce the Agreement. If Airline is the surviving corporation or other entity in such a merger, the provisions of the preceding sentence shall not be applicable.

Section 17.15 Minority Business Enterprise Provisions.

Notwithstanding anything contained herein which may be construed or interpreted to the contrary, the Authority may provide for participation of minority business enterprises in the operation of the Airport by the Authority in accordance with any minority business enterprise program or other affirmative action program of the Authority as in effect from time to time.

Section 17.16 Severability.

In the event any provision contained in this Agreement is held to be invalid by any court of competent jurisdiction, the invalidity of any such provision shall in no way affect any other provision herein contained.

Section 17.17 Prohibition Against Grant of Exclusive Rights.

It is hereby specifically understood and agreed that nothing herein contained shall be construed to grant or authorize the granting of an exclusive right to provide aeronautical services to the public, and the Authority reserves the right to grant to others the privileges and right of conducting any or all activities of an aeronautical nature.

Section 17.18 Agreements with the United States.

The Airline agrees that this Agreement shall be subject and subordinate to the provisions of any existing or future agreements between the Authority and the United States of America relative to the operation and maintenance of the Airport System, the terms and execution of which have been or may be required as a condition precedent to the expenditure by or reimbursement to the Authority of Federal funds for the development of the Airport ("***Grant Assurances***"). In the event that this Agreement, either on its own terms or by any other reason, conflicts with or violates such Grant Assurances, the Authority has the right to amend, alter, or otherwise modify the terms of this Agreement solely as required to resolve such conflict or violation. Airline further agrees that it shall not knowingly cause the Authority to violate any Grant Assurances made by the Authority to the Federal Government in connection with the granting of such Federal funds.

Section 17.19 Subordination to Indenture.

A. This Agreement and all rights granted to Airline hereunder are expressly subordinate and subject to the lien, covenants, and provisions of the pledges, transfer, hypothecation, or assignment made by the Authority in the Indenture. In the event that enforcement of the express terms of this Agreement would result in a breach of the express terms of the Indenture, the provisions of the Indenture shall be deemed to preclude such enforcement.

B. The Authority shall have the right in its sole discretion to redeem the Bonds now outstanding or hereafter issued pursuant to the Indenture at any time and from time to time in whole or in part in accordance with the terms of such Bonds, including without limitation the right to defease all outstanding Bonds. In the event that all of the Bonds are defeased and the Indenture is thereby terminated, subject to the terms hereof, the Authority may adopt or enter into another trust indenture or other agreement providing for the issuance of debt secured by Airport System revenues and/or Passenger Facility Charges and/or Customer Facility Charges, which debt may be senior or subordinated to other debt issued or to be issued pursuant to such indenture or agreement, and such subsequent indenture or agreement shall be deemed to be the "Indenture" as defined in and for the purposes of this Agreement.

C. Airline understands that the Authority is and will be the issuer of Bonds. With respect to Bonds that may be issued in the future, the interest on which is intended to be excludable from gross income of the holders of such Bonds for Federal income tax purposes under the Internal Revenue Code of 1986, as amended (the "***Code***"), Airline agrees that it will 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 Leased Premises, if the act or failure to act may cause the Authority to be in noncompliance with the provisions of the Code, nor will Airline take, or persist in, any action or omission which may cause the interest on the tax-exempt Bonds either (i) not to be excludable from the gross income of the holders thereof for Federal income tax purposes; or (ii) to the extent the Bonds were issued as exempt from to the alternative minimum tax (the "***AMT***") to become subject to the AMT for Federal income tax purposes, and Airline elects during the Term of this Agreement not to take depreciation on any portion of the Leased Premises financed with the proceeds of tax-exempt Bonds.

D. In the event that Airport System revenues at any time shall be insufficient to pay Debt Service required under the Indenture, Airline agrees that the Authority shall have the right to require additional payments from all the Air Carriers operating at the Airport calculated pursuant to a reasonable and not unjustly discriminatory methodology sufficient to satisfy such Debt Service requirement.

Section 17.20 Approvals.

Except as expressly otherwise provided in this Agreement, whenever the approval, acceptance, or the consent of any person is required hereunder, such approval, acceptance or consent shall not be unreasonably withheld, conditioned or delayed.

Section 17.21 Representatives.

Each of the Authority and Airline shall designate a representative who, except as otherwise provided hereunder, shall be authorized to act for each of the Authority and Airline, respectively, with respect to any actions to be taken by either of them under the terms of this Agreement. For the purposes of actions to be taken by it or by the CEO, the Authority's representative shall be the CEO. Airline's representative shall be designated in a written notice delivered to the Authority. Any party hereto may change its designated representative by notice to the other party pursuant to the provisions of Section 17.10.

Section 17.22 Scope of Actions.

Any reference herein to actions by agents, employees, licensees, contractors, or subcontractors, shall respectively be deemed to be a reference to agents acting within the scope of their agency, employees acting within the scope of their employment, licensees acting within the scope of their license, contractors acting within the scope of their contract, and subcontractors acting within the scope of their subcontract.

Section 17.23 Successors and Assigns.

All of the covenants, stipulations, and agreements herein contained shall, subject to the provisions of Section 16.01, inure to the benefit of and be binding upon the successors and assigns of the parties hereto.

Section 17.24 No Third Party Beneficiaries.

Except as may be expressly set forth herein, this Agreement is for the sole benefit of the Authority and Airline and their permitted successors and assigns and nothing herein expressed or implied shall give or be construed to give to any person or entity other than the parties hereto and their successors and assigns any legal or equitable rights hereunder. Except as may be expressly set forth herein, neither this Agreement nor any provision hereof nor any Exhibit hereto shall create any right in favor of any person or entity other than the Authority and Airline and their respective successors and assigns.

Section 17.25 Counterparts.

This Agreement may be executed in one or more counterparts.

Section 17.26 Authority Authorization.

This Agreement is entered into by the Authority pursuant to the authorization duly given by the Board of Directors on _____________, 2020 at Agenda Number ____________.

IN WITNESS WHEREOF, this Agreement is duly executed by the parties hereto as of the date first written above, intending themselves to be legally bound hereby.

AIRLINE: ______________________________________

ATTEST:

By: ______________________________	By: __________________________________
Date:______________________________	Date:__________________________________
Print:______________________________	Print:__________________________________
Title:______________________________	Title:__________________________________

THE ALLEGHENY COUNTY AIRPORT AUTHORITY

ATTEST:

By: ______________________________	By: __________________________________ Christina A. Cassotis Chief Executive Officer
Date:_____________________________	Date:__________________________________
Print:_____________________________	
Title:_____________________________	
	By: __________________________________ David Minnotte Chairman
	Date:__________________________________

APPROVED AS TO FORM:

By: _______________________________
Jeffrey W. Letwin
Authority Solicitor

Date:_______________________________

Exhibit E

Calculation of Signatory Airline Fees and Charges

1. ADJUSTMENT OF SIGNATORY AIRLINE RATES

Signatory Airline rates for Airline Fees and Charges shall be adjusted as set forth in Article 7 of this Agreement. This **Exhibit E** sets forth the method to be used in calculating the Terminal Rental Rate and the Landing Fee Rate payable by Signatory Airlines.

2. SPECIAL RATE BASE ELEMENTS AND FUND DEPOSIT ALLOCATIONS

(a) The Airport System Capital Fund Deposit Requirement shall be allocated between the Terminal and the Airfield in amounts intended to cause the Landing Fee Rate and the Terminal Rental Rate to be, in the Authority's judgment, substantially as level as reasonably practical.

(b) The Authority has advanced the funds necessary to defease all Bonds that were outstanding as of December 18, 2019, in the aggregate principal amount of $24,914,089 (the "***ACAA Loan***"), and such amount shall be repaid through Airline Fees and Charges beginning in Fiscal Year 2021 in an amount intended to cause total Airline Fees and Charges to be, in the Authority's judgment, substantially as level as reasonably practical.

(c) Beginning in Fiscal Year 2021, the Signatory Airlines will fund the deficiency in the Renewal and Replacement Fund Requirement, over a period determined by the Authority, through the Terminal Rental Rate. The deficiency in the fund as of June 1, 2020 was $3,000,000.

3. CALCULATION OF SIGNATORY AIRLINE LANDING FEE RATE

(a) The "Net Airfield Cost" will be calculated for each Fiscal Year as follows:

Airfield Area O&M Expenses
+ Allocable Debt Service (including Debt Service on the ACAA Loan, net of PFC offsets applied to Debt Service pursuant to the Indenture, if applicable)
+ Allocable Coverage Requirement
+ Allocable Fund Deposit Requirements
+ Allocable Capital Projects Approved by an MII
+ Allocable Capital Projects Not Subject to Approval by an MII*
+ (-) Net Cost of Allegheny County Airport (up to the AGC Cap)
+ All other Costs allocable to the Airfield Area not listed above

= Total Airfield Cost

Minus, without duplication
- Non-Signatory Airline Landing Fees
- Other Revenues Allocable to Airfield Area, excluding Signatory Airline Landing Fees
- Other Authority Revenues Allocated in the Authority's Sole Discretion to Airfield Area
- Allocable amounts of CARES Act Funds as determined by the Authority

= Net Airfield Cost
==

(b) The Landing Fee Rate per one thousand (1,000) pounds will equal the budgeted Net Airfield Cost divided by the budgeted Maximum Gross Landed Weight in thousand-pound units of all aircraft of all Signatory Airlines landed in Revenue Aircraft Arrivals at the Airport during such Fiscal Year. The Landing Fee Rate shall be determined to the nearest one-tenth (1/10) of one cent ($.001) per each one thousand (1,000) pounds.

4. CALCULATION OF SIGNATORY AIRLINE TERMINAL RENTAL RATE

(a) The "Net Terminal Area Cost" will be calculated for each Fiscal Year as follows:

Terminal Area O&M Expenses
+ Allocable Debt Service (including repayment of the ACAA Loan, and net of PFC offsets applied to Debt Service pursuant to the Indenture, if applicable)
+ Allocable Coverage Requirement
+ Allocable Fund Deposit Requirements (including the Renewal and Replacement Fund Requirement)
+ Allocable Capital Projects Approved by an MII
+ Allocable Capital Projects Not Subject to Approval by an MII*
+ Concession Incentive Fee
+ All other Costs allocable to the Terminal Area not listed above

= Total Terminal Area Cost

Minus, without duplication
- Terminal Ramp Fees included in the Gate/Holdroom Requirement
- Automated Baggage System Charges
- Signatory Airline and Non-Signatory Airline Facility Fees and FIS Fees
- Non-Signatory Airline Terminal Rentals
- Other Revenues Allocable to Terminal Area, excluding Signatory Airline Terminal Rentals
- Other Authority Revenues Allocated in the Authority's Sole Discretion to Terminal Area
- Allocable amounts of CARES Act Funds as determined by the Authority

= Net Terminal Area Cost
==

(b) The Net Terminal Area Cost shall be divided by total square feet of the Signatory Airline Leased Premises to yield the Terminal Rental Rate per square foot per annum for the Fiscal Year.

5. NET COST OF AGC

The net revenues or, in the case of a negative number, the net Costs of Allegheny County Airport for each Fiscal Year shall equal the excess of revenues derived from the operation of AGC for such Fiscal Year over the operating requirement of AGC for such Fiscal Year calculated as provided in this **Exhibit E**. The net revenues or net Costs of AGC shall be included in the Net Airfield Cost; provided, however, that any net revenues or net Costs of AGC in excess of the AGC Cap, as adjusted from time to time in accordance with Section 7.06, shall not be included in such Net Airfield Cost.

*Excludes Capital Projects funded from the Airport System Capital Fund

Exhibit I

Terminal Modernization Program

Approval of the TMP.

The Authority has evaluated and recommended a Terminal Modernization Program to right-size the existing terminal facilities in light of the significant changes in demand and function since the existing terminal opened in 1992. Throughout this process, the Authority has closely coordinated and collaborated with the Signatory Airlines in developing the TMP facility requirements, scope, and cost estimates, including the retention of an Airline Technical Representative ("***ATR***") to represent the interests of the Signatory Airlines in the planning and design process. The ATR participated and shall continue to actively participate in the planning and design of the TMP. By execution of this Agreement, the Signatory Airlines, including Airline, have approved the cost of design of and certain enabling projects for the Terminal Modernization Program up to an aggregate amount not to exceed One Hundred Fifty Million Dollars ($150,000,000).

Estimated TMP Project Costs and Funding

Except as provided in this **Exhibit I** and in accordance with this **Exhibit I**, the total cost of the Project shall not exceed One Billion, Four Hundred Twenty-Seven Million, Five Hundred Seventeen Thousand, Five Hundred Dollars ($1,427,517,500) (equal to 102.5% of $1,392,700,000) (the "***Estimated Project Cost***"). In addition, Airline hereby approves the expenditure of an additional Ninety Million Dollars ($90,000,000) (the "***Additional Costs***") to be financed with proceeds of Bonds and to be used for (i) Airline's Fit-Out Allowance, as defined below and in **Exhibit I-3**, (ii) other leasehold fit-out costs, and (iii) renovations of existing Terminal facilities and equipment as shown on **Exhibit I-1**. Authority and Airline acknowledge that even in the absence of material changes to the Project, the Project cost estimate may change from time to time for various reasons, including, but not limited to, replacement of estimates with actual bids, inflation, and unforeseen circumstances. No less frequently than quarterly, Authority shall prepare and submit to the Signatory Airlines a Project cost estimate report and associated construction schedule.

The Authority and Airline agree that by delaying the commencement of construction of the TMP, the Authority and the ATR have estimated that the cost of the TMP has increased by approximately Sixty Million Dollars ($60,000,000) (the "***Cost of Delay***"). Any further increases to the Estimated Project Cost shall be addressed as provided in this **Exhibit I**. The Authority shall track the estimated Cost of Delay as a separate cost item for the TMP. In the event that the Authority is able to reduce the Cost of Delay, such reduced amount shall be added back to the Project Contingency (as defined below) in the Project budget, but the Authority agrees that such reduced Cost of Delay shall not be applied to expand the scope of the TMP without approval of an MII as provided in Section 9.03. Notwithstanding the foregoing, any amount of Project Contingency not required for completion of the TMP may be applied to finance Fit-Out Work (as defined below) or renovations of existing Terminal facilities and equipment without additional MII approval. Further, the Authority and Airline acknowledge and agree that, notwithstanding the provisions of this **Exhibit**

I, the anticipated opening date of the TMP is the fourth quarter of 2024, and any delay to opening beyond the fourth quarter of 2024 will be addressed as provided in this **Exhibit I**.

Financing the Project

The Authority will issue Bonds to finance the majority of the Estimated Project Cost and the Additional Costs, and the Debt Service for such Bonds shall be included in the Airline Fees and Charges upon MII approval (as set forth above), provided that interest shall be capitalized through the expected DBO of the Project to the extent permissible without jeopardizing the tax exempt status of the Bonds and principal amortization shall commence following the Date of Beneficial Occupancy except as otherwise provided in Section 9.01 and this **Exhibit I**.

In financing the TMP, the Authority will seek to optimize PFC pay-as-you-go and debt financing in the context of the overall financing package and pursue, with the Signatory Airlines' support, Federal grant funding for the TMP. The Authority shall use its diligent efforts to obtain FAA approval of authority to impose and use a PFC of $4.50 per eligible enplaned passenger to fund eligible costs of the Project, including a portion of the Debt Service on Bonds issued to finance the Project. In the event that DBO for the TMP occurs later than the end of the capitalized interest period for Bonds issued to finance all or substantially all of the TMP construction, and in order to remain in compliance with the Indenture, the amount of debt service required to be deposited into the applicable funds under the Indenture will either be funded through Airline Fees and Charges or the issuance of additional Bonds to finance capitalized interest through DBO, following consultation between the Authority and the Signatory Airlines.

As of April 2021, TMP budget contingency is $163 million, of which $92 million is Construction Contingency and $71 million is the Project Contingency. Use of contingency is subject to the approvals outlined in **Exhibit I-4**. "***Project Contingency***" represents the portion of the budgeted contingency that is not allocated to specific contracts and that, as depicted in slide 5 of **Exhibit I-4**, may be applied to provide additional Construction Contingency, additional Fit-Out Work or renovations of existing Terminal facilities and equipment. "***Construction Contingency***" represents ten percent (10%) of the budgeted cost of each contract for the TMP and may be applied as provided in slide 4 of **Exhibit I-4** for unanticipated costs of each contract. The Governance Committees (as modified below) will evaluate the use of and need for the Construction Contingency for each contract for the TMP at 50%, 75% and 90% of completion of that contract. To the extent that the Construction Contingency exceeds the amount determined to be necessary for the remainder of the contract, the excess amount shall be added to the Project Contingency. To the extent that the Construction Contingency is determined to be insufficient then, as provided in **Exhibit I-4**, funds shall be reallocated from the Project Contingency to the Construction Contingency for that contract. In addition, at 50%, 75% and 90% of completion of the TMP as a whole, a similar analysis of the overall Construction Contingency for all contracts and the overall Project Contingency shall be undertaken by the PMO. To the extent that the Construction Contingency exceeds the amount determined to be necessary for the remainder of the TMP, the excess amount shall be added to the Project Contingency. To the extent that the Construction Contingency is determined to be insufficient then, as provided in **Exhibit I-4**, funds shall be reallocated from the Project Contingency to the Construction Contingency for the TMP. Each reallocation of funds between the contingencies described in this paragraph shall only be undertaken after approval by a majority vote of each of the

Financial Oversight Committee and the Construction Committee and the use of Construction Contingency or Project Contingency funds shall be approved as provided in **Exhibit I-4**.

Proprietary Millwork and Fixtures

As part of the TMP, the Authority has allocated an allowance to all Signatory Airlines (the "***Fit-Out Allowance***"), which, if chosen by Airline, shall be applied to (1) the Airline's costs of design, construction management, fabrication, acquisition, installation, construction, or relocation of ticket counters, make-up and related equipment and (2) the costs of conversion of Airline's leased ticketing office space and baggage service office space ("***Airline Office Space***") from shell condition to finished condition, including furniture, fixtures and equipment ("***FF&E***"). The Fit-Out Allowance amounts are shown on **Exhibit I-3**. A portion of the Fit-Out Allowance will be allocated on the basis of the total square feet of Airline's Airline Office Space and must be used for the fit-out of the Airline's Airline Office Space in the amounts per square foot shown on **Exhibit I-3**. Airline shall have the option either to accept the Airline Office Space, ticket counters and related ticketing equipment in the condition that will be provided by the Project or to accept the Fit-Out Allowance and follow the procedure set forth below. For Airline's ticket counters and related equipment, Airline may elect to apply the amounts shown on **Exhibit I-3** for each category of expenses to the cost of Airline's proprietary ticket counters and equipment, by category, or to accept the components of the ticket counters described in **Exhibit I-3** below as provided by the Project.

If Airline elects to accept the Fit-Out Allowance, no less than twenty-eight (28) months before DBO, Airline shall provide the Authority with Airline's standards and design requirements for such Airline Office Space, ticket counters and related equipment. The Authority, as part of the TMP, shall design and construct such Airline Office Space consistent with Airline's specifications; provided, however, that Airline shall be responsible for all costs of such design and construction in excess of the Fit-Out Allowance. Approximately twenty-five (25) months prior to DBO, the Authority shall provide Airline with an estimate of the cost of the design and construction of the Airline Office Space based upon Airline's specifications. Airline shall have four (4) weeks to (i) accept such estimate, (ii) provide revised specifications for such improvements to the Authority, or (iii) elect to accept the Airline Office Space in the condition to be provided as part of the Project. If the estimated cost accepted by Airline exceeds the Fit-Out Allowance, Airline shall pay to the Authority the difference between the estimated cost of the Airline Office Space and the Fit-Out Allowance over a period of twelve (12) months from the date of Airline's acceptance of such estimate, and such amount shall be applied to the cost of the Airline Office Space. The Authority will not approve change orders related to the Fit-Out Allowance without consulting Airline. The Authority will use reasonable discretion in accommodating change order requests by Airline, but Airline will be responsible for any resulting cost increase, including the cost of rework or resulting delays. As soon as reasonably possible after DBO, the Authority shall provide Airline with a reconciliation stating the actual cost of the design and construction of the Airline Office Space and, if such cost is less than had been projected, refund the difference between the projected amount and the actual cost of such space, up to the amount paid by Airline, within thirty (30) days after completion of such reconciliation. If the cost of design and construction of the Airline Office Space exceeds the projected amount, Airline shall pay the difference to the Authority within thirty (30) days of receipt of said reconciliation. The Authority shall install such improvements as part of the TMP. Airline acknowledges that the funds provided as part of the Fit-Out Allowance are proceeds of Bonds and Airline agrees not to take depreciation on the improvements funded with the foregoing allowance.

If Airline does not provide the Authority with its final standards and design requirements for such Airline Office Space at least twenty-eight (28) months before DBO, Airline's Airline Office Space shall be provided to Airline built out consistent with the design standards to be determined by the Authority in consultation with the Signatory Airlines.

When design of the tenant improvements described on **Exhibit I-3** (the "***Fit-Out Work***") has reached each of the following stages: thirty percent (30%), sixty percent (60%) and ninety percent (90%), the Authority shall provide Airline with the plans and specifications and the project cost estimate for the Fit-Out Work, and consult with the Airline on any adjustments thereto. **Exhibit I-3** to the Original Agreement is hereby replaced with **Exhibit I-3** attached hereto.

The Authority will provide standardized ticket counters and related equipment as part of the TMP in Airline's Leased Premises and in Common Use Facilities. If Airline desires to use proprietary fit-outs, however, Airline shall provide such ticket counters and related equipment to the Authority no less than six (6) months before DBO and such proprietary ticket counters and related equipment shall be installed as part of the TMP within Airline's Leased Premises. Airline may apply the applicable portion of the Fit-Out Allowance shown on **Exhibit I-3** to the cost of fabricating and delivering or relocating Airline's proprietary ticket counters and related equipment. Airline shall submit invoices and supporting backup documentation to the Authority for reimbursement of the eligible costs of such proprietary fit-out. The Authority will review such invoices and supporting materials for sufficiency and, within forty-five (45) days after receipt of such invoices and related materials, the Authority shall reimburse the Airline for such eligible costs. If the Authority finds that any costs are not eligible or there is insufficient backup documentation to make a final determination regarding eligibility, the Authority shall provide notice to Airline of such determination within such forty-five (45) day period and Airline may resubmit such invoices with additional supporting documentation or meet with the Authority to seek to resolve the open issues. Final determination of eligibility for reimbursement shall be made by the Authority in its reasonable judgment.

Description of the Project

The Project is more fully described in the Schematic Design attached to this **Exhibit I** as **Exhibits I-1** and **I-2**. The Project will include, among other things, (i) construction of a new landside terminal building that will be integrated with the existing airside terminal, including passenger check-in facilities, a consolidated TSA checkpoint, expanded passenger processing area, concession space, and in-line baggage screening, makeup, handling, and claim facilities; (ii) new terminal complex access roadways; (iii) a new parking garage, new rental car facilities, new surface parking lots, and a ground transportation center in the new parking garage; (iv) new Air Carrier and Authority office and support space; (v) renovations to or demolition of certain portions of the existing airside terminal; (vi) and the equipment necessary to furnish and operate the new facilities (as defined in the Project Definition Documents). The existing landside terminal and automated people-mover will be decommissioned, and the existing terminal building may be demolished.

Project Governance

In order to mitigate construction risk and make informed decisions throughout design and construction of the Project, a governance committee structure has been established to aid in obtaining support and approval of design and construction related activities; to monitor cost, budget, funding, contracts, and their changes; to meet regulatory and statutory compliance standards; to document reporting processes and generate information for decision-making; to demonstrate the Authority's involvement in the day-to-day management of capital programs; and to provide accountability and transparency.

The Executive Steering Committee will consist of the Authority's Chief Executive Officer (CEO), Chief Commercial Officer (CCO), and Chief Financial Officer (CFO), and will provide Project oversight and approval of scope, budget, schedule, procurement options, and delivery methods; align decision-making with strategic plans; coordinate with Airport staff and other committees; communicate with stakeholders and promote community outreach efforts; and make recommendations for Board approvals. The Executive Steering Committee will oversee the governance structure and may make changes to the governance structure to better align with risk, goals, priorities, and efficiencies, while maintaining controls to mitigate risks, provided that such changes do not affect the Airline's rights hereunder and the participation of the ATR in the Governance Committee (as defined below).

The ATR will continue to actively participate in the planning, design and construction of the TMP. In order to provide additional oversight of the construction of the TMP to the Signatory Airlines, the Authority agrees that the ATR shall participate in all majority votes of the Governance Committees (the Construction and Finance Oversight Committees) in each case without prejudice to the approval rights of the Signatory Airlines as set forth elsewhere in this Agreement. The Finance Oversight Committee consists of the Authority's Chief Financial Officer ("***CFO***") (chair), its Chief Development Officer ("***CDO***") (vice chair), its Vice President of Government & Corporate Affairs, and the ATR. The Construction Committee consists of the Authority's CDO (chair), CFO (vice chair), Senior Vice-President of Information Technology, Vice President of Air Service Development, Senior Vice President of Operations and Maintenance, and the ATR. Each member of the Governance Committees shall have one vote on such committee, with approval of a majority of the members required to take any action. At the request of the ATR, the Chair of the Airport Airline Affairs Committee (AAAC) for the Airport may attend meetings of the Governance Committees.

The Authority's Project Management Organization ("***PMO***") consists of the Executive Steering Committee, the Finance Oversight Committee and the Construction Committee. The Executive Steering Committee consists of the Authority's Chief Executive Officer, the CFO, the CDO, the TMP Program Manager, the Senior Vice President of Marketing and Communications (ex-officio) and the Chief Human Capital Officer.

Execution of the TMP will be led by the Authority's PMO, which is responsible for the active management of the TMP budget and delivery of the Project on behalf of the Authority. For the duration of construction, the ATR will actively participate and interface with the PMO on a consistent basis to provide regular reporting to the Signatory Airlines. The purpose of these interactions is to identify potential risk issues and to advise on the Authority's methods and techniques to control scope, schedule, budget, and quality. The PMO will review and approve the use of all contingency funds.

The ATR shall have access to and will review plans and specifications, procurement activities, contracts, monthly invoices, proposed scope changes, cost proposals, schedules and similar or related items for all project consultants, contractors, and vendors. The ATR shall also have access to and will actively monitor project communications (including RFI's, supplemental drawings, etc.) and activities and participate in project meetings related to scope, schedule and budget in order to collaborate with the PMO on preparing and presenting a monthly Airline management report to the Signatory Airlines.

Purposes of the monthly Airline management report, to be submitted to the Signatory Airlines by the ATR, will include highlighting variances from the established baseline schedule or scope, ensuring proper change review and approval by the Authority, and recommending further investigations and/or remediations. A key objective of the monthly Airline management report will be to anticipate and forecast schedule and budget risks, with a focus on the potential for the TMP costs to exceed the Estimated Project Cost and to streamline the Signatory Airline's participation in mitigating any such potential cost increases.

The Construction Committee and the Finance Oversight Committee will address more specific risks. Financial oversight includes aligning the Project scope with Project funding; complying with applicable funding requirements; reviewing Project budgets and costs; evaluating Project eligibility; allocating funding sources and addressing funding overages and shortfalls; coordinating finance and construction approvals; advising others on funding issues; and making recommendations for Board approval. Construction related oversight includes evaluating and approving bids, proposals, requests for reimbursements, contract awards, and modifications for capital related costs of design and construction; reviewing and approving change orders and back charges; tracking MBE/DBE goals; providing guidance, coordination, and development of plans and procedures relating to capital programs; reviewing and approving claims and settlements for design and construction; providing close-out of capital projects; and making recommendations for Board approval.

The comments of the Construction and Finance Committee(s) shall be given due consideration prior to the Authority's execution of any Project construction contract. In the event of any material change to the scope of the Project, including any material value engineering, the Construction and Finance Committee(s) shall review and comment on such proposed changes in scope as provided below under "Changes in Project Scope."

The ATR will be invited to attend the Project governance meetings of the Project Construction and Finance Oversight Committee(s) (the "**Governance Committees**"). The Authority will give due consideration to the reasonable requests, suggestions, and recommendations of the ATR.

Changes in Project Cost

If the cost of the Project is expected to exceed the Estimated Project Cost, the Authority will notify the ATR and the Chairman of the PIT Airport Affairs Committee of such cost increase and of the manner that the Authority proposes to address such cost increase. Depending on the proposed method for addressing such cost increase, the Authority will take one of the following approaches:

1. If the funds necessary to pay such increased cost are taken from Other Authority Revenues, additional grants, PFCs, foundation support, or Authority pay-as-you-go contributions, and do not and will not increase Airline Fees and Charges, then no Signatory Airline approval of such cost increase shall be required. Such additional cost will be added to the Estimated Project Cost, resulting in a "***Revised Project Cost***", which will replace the Estimated Project Cost throughout this Agreement.

2. The Authority may address such cost increase through value engineering, to reduce the Project cost estimate to within the Estimated Project Cost, while maintaining the original TMP facility requirements and general parameters of the Project as set forth in the Schematic Design attached to this Exhibit.

3. If the Authority proposes to address such cost increase through value engineering, to reduce the Project cost estimate to within the Estimated Project Cost, but resulting in a material reduction in the scope of the Project, then the provisions relating to a Change in Project Scope, below, will apply.

4. If a Project cost increase is due to a request of a particular Air Carrier or Air Carriers, then the Authority will obtain an agreement from such Air Carrier or Air Carriers to pay such additional costs. Such additional cost will be added to the Estimated Project Cost, resulting in a "Revised Project Cost", which will replace the Estimated Project Cost throughout this Agreement, or shall be treated as a Special Facility as provided in the Agreement, at the option of the Authority.

5. If the Authority proposes to include some or all of such cost increase in the Airline Fees and Charges, and in the event the Authority and the Signatory Airlines cannot reach an agreement on a Revised Project Cost to replace the Estimated Project Cost throughout this Agreement, the Authority shall conduct an MII vote among the Signatory Airlines to approve or reject the cost increase as provided in this paragraph. Notwithstanding Section 9.03 of this Agreement, any Signatory Airline that has not provided the Authority its written disapproval of the proposed cost increase on or prior to ten (10) days after the Authority requested an MII vote on this matter shall be considered to have registered its approval. If an MII approves such cost increase, then the resulting Revised Project Cost will replace the Estimated Project Cost throughout this Agreement. If an MII disapproves of such cost increases, then either (i) one of the preceding alternatives (1 through 4) may be proposed by the Authority; or (ii) the Signatory Airlines will collaborate with the Authority on an alternative course of action, which may include major design changes, changes in facility requirements, or a phased approach to construction.

<u>Schedule Changes Beyond Control of the Authority</u>

In the event that a delay in the Project schedule occurs, which extends the completion date of the Project past the anticipated opening date of second quarter of 2023, which delay is caused due to scope changes approved as provided in this **Exhibit I** and/or due to Force Majeure as provided in Section 17.04, the Estimated Project Cost or Revised Project Cost may increase accordingly without an MII approval to reflect the estimated cost of delay in an amount of up to four percent (4%) per year during the delay.

Changes in Project Scope

The Authority and Airline acknowledge that the COVID-19 pandemic has created unique issues relating to the health and safety of the public causing both the Authority and the Signatory Airlines to evaluate how to address the issues arising from the pandemic in designing and operating facilities, including the Project. The Authority is studying the implications of COVID-19 on the design for the Project and will consult with the Signatory Airlines and the ATR regarding potential changes to the design and scope of the Project.

If the Authority proposes a material change in the scope of the Project, then the Authority shall notify the ATR and the Chairman of the PIT Airport Affairs Committee of such proposed change and schedule a meeting with the Signatory Airlines (which may be by teleconference) to discuss the rationale for the change. Comments of the Signatory Airlines will be provided to and considered by the ATR, and the ATR shall provide a recommendation to the Authority within twenty (20) days of the Authority's meeting with the Signatory Airlines regarding how best to address such proposed change in Project scope. Subject to the provisions regarding Changes in Project Cost, above, the Authority shall determine the manner in which such proposed changes in Project scope shall be addressed; provided, however, that if any such material change in Project scope would affect only one or a minority of the Air Carriers operating at the Airport, the Authority shall first meet with and consider the comments of such affected Air Carriers before making any such determination.

O&M Expense Savings and Revenue Enhancements

The TMP has been designed and will be constructed in a manner that will reduce O&M Expenses substantially compared to the alternative of retaining the existing Terminal facilities. The projected O&M Expense savings are attributable to (1) the construction and improved operation of the new Terminal and multimodal center, (2) improved operation of the existing airside core and concourses that remain post-TMP, and (3) renovation associated with downsizing of concourses A and B (the knuckles). These detailed and comprehensive projections were prepared by an independent party, vetted with the ATR, refined based on ATR comments, then validated by the ATR. The Authority's management has endorsed and will actively pursue such O&M Expense reductions. The Authority's management is committed to ensuring that the Airport is operated efficiently and that the Authority's staff is and remains highly productive. To that end, the Authority has identified and executed on a variety of means to reduce O&M Expenses since the beginning of the COVID-19 pandemic.

The Authority estimates that the development of the TMP will realize annual O&M Expense savings compared to 2019 of approximately $21 million in 2025 dollars, and the PMO's analysis has been validated by the ATR. The estimated savings include cost reductions of approximately $5.4

million from the decommissioning of passenger conveyances, including the train (APM); $3.3 million from decommissioning the existing automated baggage handling system (ABS); asset management savings of $5.4 million; energy and utility savings of approximately $1.5 million; and other net O&M Expense reductions of $5.5 million. These estimates are subject to change based on factors beyond the control of the Authority or at the request of the Signatory Airlines.

In addition to the decommissioning of the existing APM and ABS, several measures are planned to reduce O&M Expenses in connection with undertaking the TMP, including:

1. Developing and implementing measurement and verification protocols to reduce the use of energy within the terminal facilities through metering data and the use of building automation system ("***BAS***") information.
2. Constructing the first in the nation airport energy microgrid to provide significant energy savings as well as heighten reliability of energy delivery to the Airport.
3. Undertaking an extensive commissioning program prior to and at DBO to ensure that the new building systems are operating at peak efficiency and design capacity.
4. Enhancing building performance of the terminal facilities through maintaining the new high efficiency systems to obtain expected design performance outputs.
5. Developing and monitoring building data analytics utilizing BAS information to improve the performance of the building's systems and to establish triggers for maintenance of such systems when established performance parameters are not met.
6. Using a computerized building management system to support delivery to and monitoring by the Authority's management of key performance indicators ("***KPIs***") that reflect reliability centered maintenance principles to further ensure that the building systems are operating effectively and efficiently, consistent with their design.

Finally, as it has been doing for many years, the Authority plans to continue to seek out and embrace new opportunities for revenue generation that will reduce the overall costs paid by the Signatory Airlines. Such opportunities may include, for example, developing additional non-aeronautical assets, introducing new public parking products, seeking to maximize concessions revenue from new and existing concessions operations, promoting and developing facilities for new air cargo service, and working with new and existing tenants to expand their operations at the airport, all in an intentional effort to generate additional income that can be applied to help reduce aeronautical costs.

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APPENDIX E

FORM OF OPINION OF BOND COUNSEL

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[FORM OF OPINION OF BOND COUNSEL]

To: The Allegheny County Airport Authority

We have served as bond counsel to our client the Allegheny County Airport Authority (the "Authority") in connection with the issuance by the Authority of its $719,850,000 Airport Revenue Bonds, Series 2021A (AMT) (the "Series 2021A Bonds") and $112,820,000 Airport Revenue Bonds, Series 2021B (Non-AMT) (the "Series 2021B Bonds" and, together with the Series 2021A Bonds, the "Series 2021 Bonds"), each dated the date of this letter.

The Series 2021 Bonds are issued pursuant to a resolution adopted by the Board of Directors of the Authority on July 16, 2021 (the "Resolution") and the Master Trust Indenture dated as of December 1, 2019 (as previously supplemented, the "Trust Indenture"), as supplemented and amended by the Second Supplemental Trust Indenture dated as of August 1, 2021 (the "Second Supplement" and, together with the Trust Indenture, the "Indenture"), each between the Authority and The Bank of New York Mellon Trust Company, N.A., as trustee (the "Trustee"). Capitalized terms not otherwise defined in this letter are used as defined in the Indenture.

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the Series 2021 Bonds, copies of the signed and authenticated Bond of the first maturity for each series of the Series 2021 Bonds, the Resolution, the Indenture and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

1. The Series 2021 Bonds and the Indenture are valid and binding obligations of the Authority, enforceable in accordance with their respective terms.

2. The Series 2021 Bonds constitute limited obligations of the Authority, and the principal of and interest on (collectively, "debt service") the Series 2021 Bonds, together with debt service on any other Bonds issued and Outstanding on a parity with the Series 2021 Bonds as provided in the Trust Indenture, are payable from and secured solely by the Net Revenues and other sources provided therefor in the Indenture. The payment of debt service on the Series 2021 Bonds is not secured by an obligation or pledge of any money raised by taxation, and the Series 2021 Bonds do not represent or constitute a general obligation or a pledge of the faith and credit of the County of Allegheny, the Commonwealth of Pennsylvania or any of its political subdivisions.

3. Interest on the Series 2021 Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except interest on any Series 2021A Bond for any period during which that Series 2021A Bond is held by a "substantial user" of the facilities financed or a "related person," as those terms are used in Section 147(a) of the Code. Interest on the Series 2021A Bonds is an item of tax preference for purposes of the federal alternative minimum tax. Interest on the Series 2021B Bonds is not an item of tax

preference for purposes of the federal alternative minimum tax. Interest on the Series 2021 Bonds, and any profits made on their sale, is exempt from taxation by the Commonwealth of Pennsylvania and all political subdivisions thereof. We express no opinion as to any other tax consequences regarding the Series 2021 Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined, (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Authority and (iii) the due authorization, signing and delivery by, and the binding effect upon and enforceability against, the Trustee of the Indenture.

We express no opinion herein regarding the priority of the lien on the Net Revenues or other funds created by the Indenture.

In rendering those opinions with respect to treatment of the interest on the Series 2021 Bonds under the federal tax laws, we further assume and rely upon compliance with the covenants in the proceedings and documents we have examined, including those of the Authority. Failure to comply with certain of those covenants subsequent to issuance of the Series 2021 Bonds may cause interest on the Series 2021 Bonds to be included in gross income for federal income tax purposes retroactively to their date of issuance.

The rights of the owners of the Series 2021 Bonds and the enforceability of the Series 2021 Bonds and the Indenture are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally, to the application of equitable principles, whether considered in a proceeding at law or in equity, to the exercise of judicial discretion, and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are stated only as of the time of its delivery, and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the Series 2021 Bonds is concluded upon delivery of this letter.

Respectfully submitted,

APPENDIX F

DTC AND THE BOOK-ENTRY ONLY SYSTEM

The information in this section concerning DTC and DTC's book-entry system has been obtained from DTC. The Authority takes no responsibility for the accuracy thereof.

General

The 2021 Bonds, when issued, will be registered in the name of Cede & Co., DTC's partnership nominee. When the 2021 Bonds are issued, ownership interests will be available to purchasers only through a book-entry system maintained by DTC (the "Book-Entry-Only System"). One fully-registered bond certificate will be issued for each series of the 2021 Bonds, each in the aggregate principal amount of such issue or series, 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. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instrument (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 Incoming Clearing Corporation, all of which are registered clearing agencies. DTC 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 and www.dtc.org.

Purchases of 2021 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the 2021 Bonds on DTC's records. The ownership interest of each actual purchaser of each Security ("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 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 2021 Bonds, except in the event that use of the book-entry system for the 2021 Bonds is discontinued.

To facilitate subsequent transfers, all 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 2021 Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the 2021 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 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.

Redemption notices shall be sent to DTC. If less than all of the 2021 Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Redemption proceeds, distributions, and dividend payments on the 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 Authority or Trustee ("Agent") on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, nor its nominee, Agent, or Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as securities depository with respect to the 2021 Bonds at any time by giving reasonable notice to Authority or Agent. Under such circumstances, in the event that a successor securities depository is not obtained, Security certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, 2021 Bond certificates will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Authority believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.

Notices

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to beneficial owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of 2021 Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the 2021 Bonds, such as redemptions, tenders, defaults, and proposed amendments to the bond documents. Beneficial owners of the 2021 Bonds may wish to ascertain that the nominee holding the 2021 Bonds for their benefit has agreed to obtain and transmit notices to beneficial owners, or in the alternative, beneficial owners may wish to provide their names and addresses to the Trustee 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 2021 Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the 2021 Bonds. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the 2021 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

NEITHER THE AUTHORITY NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO SUCH PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE PAYMENT TO, OR THE PROVIDING OF NOTICE FOR, SUCH PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES.

Transfers of 2021 Bonds

To facilitate subsequent transfers, all 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 the 2021 Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the 2021 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such 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.

None of the Authority, the Underwriter or the Trustee will have any responsibility or obligation, legal or otherwise, to any party other than to the registered owners of any Bond on the registration books of the Trustee.

Discontinuance of Book-Entry-Only System

In the event (i) DTC determines not to continue to act as securities depository for the 2021 Bonds or (ii) the Authority, with the consent of the Trustee, determines in accordance with the terms of the Indenture that (a) DTC is incapable of discharging its duties or (b) it is in the best interests of the holders of the 2021 Bonds not to continue the Book-Entry-Only System or that interests of the beneficial owners of the 2021 Bonds might be adversely affected if the Book-Entry-Only System is continued, then the Authority will discontinue the Book-Entry-Only System with DTC. Upon the occurrence of the event described in (i) or (ii)(a) above, the Authority will attempt to locate another qualified securities depository. If the Authority fails to identify another qualified securities depository to replace DTC or makes the determination noted in (ii)(b) above, the Trustee will authenticate and deliver the 2021 Bonds in accordance with the Indenture.

So long as Cede & Co. is the registered owner of the 2021 Bonds as nominee of DTC, references herein to the holders or registered owners of the 2021 Bonds will mean Cede & Co. and will not mean the beneficial owners of the 2021 Bonds.

None of the Authority, the Trustee or the Underwriters will have any responsibility or obligation to the Participants, DTC or the persons for whom they act with respect to (i) the accuracy of any records maintained by DTC or by any Direct or Indirect Participant of DTC, (ii) payments or the providing of notice to Direct Participants, the Indirect Participants or the beneficial owners, (iii) the selection by DTC or by any Direct or Indirect Participant of any beneficial owner to receive payment in the event of a partial redemption of the 2021 Bonds or (iv) any other action taken by DTC or its partnership nominee as owner of the 2021 Bonds.

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APPENDIX G

SPECIMEN MUNICIPAL BOND INSURANCE POLICY

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ASSURED GUARANTY MUNICIPAL

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

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)

ALLEGHENY COUNTY AIRPORT AUTHORITY (PITTSBURGH INTERNATIONAL AIRPORT) • AIRPORT REVENUE BONDS, SERIES 2021A (AMT) AND SERIES 2021B (NON-AMT)

Mixed Sources
Product group from well managed forests, controlled sources and recycled wood or fiber.

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