

## OFFICIAL STATEMENT DATED SEPTEMBER 17, 2020

NEW ISSUES — BOOK-ENTRY ONLY

Ratings:

Moody's: A1

S&amp;P: A

(See "RATINGS" herein.)

In the opinion of Bracewell LLP, Tax Counsel, under existing law, interest on the Series 2020A Bonds (i) is excludable from gross income for federal income tax purposes under section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except for any period during which a Series 2020A Bond is held by a person who is a "substantial user" of the facilities financed or refinanced with the proceeds of the Series 2020A Bonds or a "related person" to such a "substantial user," each within the meaning of section 147(a) of the Code and (ii) is an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer's alternative minimum tax liability. Furthermore, in the opinion of Tax Counsel, under existing law, (i) interest on the Series 2020B Bonds is excludable from gross income for federal income tax purposes under section 103 of the Code and (ii) the Series 2020B Bonds are "private activity bonds" within the meaning of the Code, but pursuant to the American Recovery and Reinvestment Act of 2009, interest on the Series 2020B Bonds is not an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer's alternative minimum tax liability. See "TAX MATTERS FOR THE TAX-EXEMPT BONDS" herein for a discussion of the opinion of Tax Counsel.

Interest on the Taxable Series 2020C Bonds is not excludable from gross income for federal tax purposes under existing law. See "TAX MATTERS FOR THE TAXABLE BONDS" herein.



\$131,620,000

**SUBORDINATE LIEN REVENUE  
REFUNDING BONDS,  
SERIES 2020A (AMT)**

**\$863,675,000  
CITY OF HOUSTON, TEXAS  
AIRPORT SYSTEM**

\$71,565,000

**SUBORDINATE LIEN REVENUE  
REFUNDING BONDS,  
SERIES 2020B (NON-AMT)**



\$660,490,000

**SUBORDINATE LIEN REVENUE  
REFUNDING BONDS,  
SERIES 2020C (TAXABLE)**

Interest Accrual Date: Date of Delivery

Due: July 1: see inside cover pages

This Official Statement is provided to furnish information in connection with the offering by the City of Houston, Texas (the "City") of its Airport System Subordinate Lien Revenue Refunding Bonds, Series 2020A (AMT) (the "Series 2020A Bonds"), its Airport System Subordinate Lien Revenue Refunding Bonds, Series 2020B (Non-AMT) (the "Series 2020B Bonds" and, together with the Series 2020A Bonds the "Tax-Exempt Bonds"), and its Airport System Subordinate Lien Revenue Refunding Bonds, Series 2020C (Taxable) (the "Taxable Series 2020C Bonds" or the "Taxable Bonds"). The Tax-Exempt Bonds and the Taxable Bonds together are referred to herein as the "Series 2020 Bonds."

Proceeds of the sale of the Series 2020A Bonds will be used to (i) refund the Refunded Notes (as defined herein) and (ii) pay related costs of issuance of the Series 2020A Bonds. Proceeds of the sale of the Series 2020B Bonds will be used to (i) refund the 2020B Refunded Bonds (as defined herein) and (ii) pay related costs of issuance of the Series 2020B Bonds. Proceeds of the sale of the Taxable Series 2020C Bonds will be used to (i) refund the 2020C Refunded Bonds (as defined herein) and (ii) pay related costs of issuance of the Taxable Series 2020C Bonds. See "PURPOSE AND PLAN OF FINANCING."

The Series 2020 Bonds will be issued in fully registered form in denominations of \$5,000 or any integral multiple thereof. Interest on the Series 2020 Bonds will accrue from their Date of Delivery and will be payable semi-annually on each January 1 and July 1, commencing January 1, 2021. The Bank of New York Mellon Trust Company, National Association (the "Paying Agent/Registrar") is the initial Paying Agent/Registrar.

The Series 2020 Bonds, when issued, will be registered in the name of Cede & Co., as registered owner and nominee for The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Series 2020 Bonds, until DTC resigns or is discharged. The Series 2020 Bonds will be available to purchasers only in book-entry form. For as long as Cede & Co. is the exclusive registered owner of the Series 2020 Bonds, the principal of and interest on the Series 2020 Bonds will be payable by the Paying Agent/Registrar to DTC, which will be responsible for making such payments to DTC Participants for subsequent remittance to the owners of beneficial interests in the Series 2020 Bonds. The purchasers of the Series 2020 Bonds will not receive certificates representing their beneficial ownership interests therein.

The Series 2020 Bonds are special obligations of the City which, together with the Outstanding Subordinate Lien Bonds and any Additional Subordinate Lien Bonds hereafter issued, are payable from, and equally and ratably secured by, a lien on the Net Revenues of the Houston Airport System, subject and subordinate to the prior and superior lien of Outstanding Senior Lien Obligations and Additional Senior Lien Obligations, if any, all as defined herein, and certain Funds established pursuant to the Ordinance (as defined herein). See "COVENANTS AND TERMS OF THE ORDINANCE."

THE SERIES 2020 BONDS DO NOT CONSTITUTE AN INDEBTEDNESS OR GENERAL OBLIGATION OF THE CITY. OWNERS OF THE SERIES 2020 BONDS SHALL NEVER HAVE THE RIGHT TO DEMAND PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2020 BONDS FROM ANY FUNDS RAISED OR TO BE RAISED BY TAXATION.

The Series 2020A Bonds are subject to optional and mandatory redemption prior to maturity, as described herein. The Series 2020B Bonds are not subject to redemption prior to maturity. The Taxable Series 2020C Bonds are subject to optional redemption, as described herein. See "THE SERIES 2020 BONDS - Redemption."

**SEE INSIDE COVER PAGES FOR MATURITIES,  
PRINCIPAL AMOUNTS, INTEREST RATES, PRICES AND YIELDS**

This cover page is not intended to be a summary of the terms of, or the security for, the Series 2020 Bonds. Investors are advised to read the Official Statement in its entirety to obtain information essential to the making of an informed investment decision.

The Series 2020 Bonds are offered by the Underwriters listed below when, and as if issued by the City and accepted by the Underwriters, subject to the approving opinions of the Attorney General of the State of Texas and the opinions of Bracewell LLP, Houston, Texas, Co-Bond Counsel and Tax Counsel, and of West & Associates L.L.P., Houston, Texas, Co-Bond Counsel, as to the validity of the issuance of the Series 2020 Bonds under the Constitution and the laws of the State of Texas. Certain matters will be passed upon for the City by its Special Disclosure Co-Counsel, Haynes and Boone, LLP, Houston, Texas and the Law Offices of Francisco G. Medina, Houston, Texas. Certain other legal matters will be passed upon for the Underwriters by their co-counsel, McCall, Parkhurst & Horton L.L.P., Houston, Texas, and Hardwick Law Firm, LLC, Houston, Texas. The Series 2020 Bonds are expected to be available for delivery on or about October 20, 2020 (the "Date of Delivery") through the facilities of DTC in New York, New York.

MORGAN STANLEY

BOFA SECURITIES

BLAYLOCK VAN, LLC

STERN BROTHERS

UBS

TD SECURITIES

## MATURITY AND PRICING SCHEDULES

**\$131,620,000**  
**CITY OF HOUSTON, TEXAS**  
**AIRPORT SYSTEM**  
**SUBORDINATE LIEN REVENUE REFUNDING BONDS,**  
**SERIES 2020A (AMT)**

**Interest Accrual Date: Date of Delivery**

**CUSIP Prefix<sup>(1)</sup>: 442349**

**\$72,715,000 Serial Bonds**

Maturity (July 1)	Principal Amount	Interest Rate	Initial Yield	CUSIP Suffix <sup>(1)</sup>
2023	\$1,000,000	5.000%	0.660%	DK9
2024	1,000,000	5.000	0.750	DL7
2025	1,000,000	5.000	0.850	DM5
2026	1,000,000	5.000	1.020	DN3
2027	3,000,000	5.000	1.180	DP8
2028	3,000,000	5.000	1.360	DQ6
2029	4,710,000	5.000	1.530	DR4
2030	4,950,000	5.000	1.680	DS2
2031 <sup>(2)</sup>	3,000,000	5.000	1.810 <sup>(3)</sup>	DT0
***	***	***	***	***
2033 <sup>(2)</sup>	5,345,000	5.000	2.010 <sup>(3)</sup>	DU7
2034 <sup>(2)</sup>	5,615,000	5.000	2.060 <sup>(3)</sup>	DV5
2035 <sup>(2)</sup>	5,895,000	4.000	2.340 <sup>(3)</sup>	DW3
2036 <sup>(2)</sup>	6,130,000	4.000	2.390 <sup>(3)</sup>	DX1
2037 <sup>(2)</sup>	6,375,000	4.000	2.440 <sup>(3)</sup>	DY9
2038 <sup>(2)</sup>	6,630,000	4.000	2.530 <sup>(3)</sup>	DZ6
2039 <sup>(2)</sup>	6,895,000	4.000	2.570 <sup>(3)</sup>	EA0
2040 <sup>(2)</sup>	7,170,000	4.000	2.610 <sup>(3)</sup>	EB8

**\$58,905,000 Term Bonds**

\$58,905,000 Term Bonds Due July 1, 2047<sup>(2)(4)</sup>, Interest Rate 4.000%, Yield 2.750%<sup>(3)</sup>, CUSIP Suffix<sup>(1)</sup> EC6

- <sup>(1)</sup> CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by S&P Global Market Intelligence on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Services. None of the City, the Co-Financial Advisors or the Underwriters is responsible for the selection or correctness of the CUSIP numbers set forth herein.
- <sup>(2)</sup> The City reserves the right, at its option, to redeem Series 2020A Bonds having stated maturities on or after July 1, 2031, in whole or in part, in principal amounts of \$5,000 or any integral multiple thereof, on July 1, 2030, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption. See "THE SERIES 2020 BONDS – Redemption – *Optional Redemption*."
- <sup>(3)</sup> The initial yield is calculated to the first optional redemption date.
- <sup>(4)</sup> Subject to mandatory sinking fund redemption, as described in "THE SERIES 2020 BONDS – Redemption – *Mandatory Sinking Fund Redemption of the Series 2020A Bonds*."

**\$71,565,000**  
**CITY OF HOUSTON, TEXAS**  
**AIRPORT SYSTEM**  
**SUBORDINATE LIEN REVENUE REFUNDING BONDS,**  
**SERIES 2020B (NON-AMT)**

**Interest Accrual Date: Date of Delivery**

**CUSIP Prefix<sup>(1)</sup>: 442349**

<u>Maturity (July 1)<sup>(2)</sup></u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Initial Yield</u>	<u>CUSIP Suffix<sup>(1)</sup></u>
2026	\$13,320,000	5.000%	0.700%	ED4
2027	13,720,000	5.000	0.880	EE2
2028	14,110,000	5.000	1.060	EF9
2029	14,875,000	5.000	1.230	EG7
2030	15,540,000	5.000	1.380	EH5

<sup>(1)</sup> CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by S&P Global Market Intelligence on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Services. None of the City, the Co-Financial Advisors or the Underwriters is responsible for the selection or correctness of the CUSIP numbers set forth herein.

<sup>(2)</sup> The Series 2020B Bonds are not subject to redemption prior to maturity. See "THE SERIES 2020 BONDS – Redemption."

**\$660,490,000**  
**CITY OF HOUSTON, TEXAS**  
**AIRPORT SYSTEM**  
**SUBORDINATE LIEN REVENUE REFUNDING BONDS,**  
**SERIES 2020C (TAXABLE)**

**Interest Accrual Date: Date of Delivery**

**CUSIP Prefix<sup>(1)</sup>: 442349**

**Price: 100%**

<u>Maturity (July 1)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>CUSIP Suffix<sup>(1)</sup></u>
2022	\$ 25,900,000	0.883%	EJ1
2023	71,370,000	1.054	EK8
2024	72,125,000	1.272	EL6
2025	73,510,000	1.372	EM4
2026	60,495,000	1.716	EN2
2027	59,400,000	1.816	EP7
2028	60,500,000	2.085	EQ5
2029	21,965,000	2.235	ER3
2030	22,455,000	2.285	ES1
2031 <sup>(2)</sup>	116,850,000	2.385	ET9
2032 <sup>(2)</sup>	75,920,000	2.485	EU6

<sup>(1)</sup> CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by S&P Global Market Intelligence on behalf of the American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Services. None of the City, the Co-Financial Advisors or the Underwriters is responsible for the selection or correctness of the CUSIP numbers set forth herein.

<sup>(2)</sup> The City reserves the right, at its option, to redeem Taxable Series 2020C Bonds having stated maturities on or after July 1, 2031, in whole or in part, in principal amounts of \$5,000 or any integral multiple thereof, on July 1, 2030, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption. See "THE SERIES 2020 BONDS – Redemption – *Optional Redemption*."



No broker, dealer, sales representative or any other person has been authorized by the City or the Underwriters to give any information or to make any representation other than as contained in this Official Statement in connection with the offering described in it and, if given or made, such other information or representation must not be relied upon as having been authorized by any of the foregoing. This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy any securities other than those described on the cover page, nor shall there be any offer to sell, solicitation of any offer to buy or sale of such securities by any persons in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

THE SERIES 2020 BONDS HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, IN RELIANCE UPON EXEMPTIONS CONTAINED IN SUCH ACT. ANY REGISTRATION OR QUALIFICATION OF THE SERIES 2020 BONDS IN ACCORDANCE WITH APPLICABLE PROVISIONS OF SECURITIES LAW OF THE STATES IN WHICH THE SERIES 2020 BONDS MAY HAVE BEEN REGISTERED OR QUALIFIED AND ANY EXEMPTION FROM REGISTRATION OR QUALIFICATION IN OTHER STATES CANNOT BE REGARDED AS A RECOMMENDATION THEREOF.

IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN EXAMINATION OF THE TERMS OF THIS OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. THE SERIES 2020 BONDS HAVE NOT BEEN RECOMMENDED BY ANY FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHERMORE, THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED THE ACCURACY OR DETERMINED THE ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

This Official Statement includes descriptions and summaries of certain events, matters and documents. Such descriptions and summaries do not purport to be complete, and all such descriptions, summaries and references thereto are qualified in their entirety by reference to this Official Statement in its entirety and to each such document, copies of which may be obtained from the City or from the Co-Financial Advisors to the City for this issuance. Any statements made in this Official Statement or the appendices hereto involving matters of opinion or estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of such opinions or estimates will be realized.

This Official Statement is delivered in connection with the sale of securities referred to herein and may not be reproduced or used, in whole or in part, for any other purposes. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2020 Bonds in any jurisdiction in which it is unlawful to make such offer, solicitation or sale. No dealer, salesperson or other person has been authorized by the City to give any information or to make any representation other than those contained herein, and, if given or made, such other information or representation must not be relied upon as having been authorized by the City or any other person. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the matters described herein since the date hereof.

**Certain statements in this Official Statement, which may be identified by the use of such terms as “plan,” “project,” “expect,” “estimate,” “budget” or other similar words, constitute forward-looking statements. Such forward-looking statements refer to the achievement of certain results or other expectation or performance that involves known and unknown risks, uncertainties and other factors. These risks, uncertainties and other factors may cause actual results, performance or achievements to be materially different from any projected results, performance or achievements described or implied by such forward-looking statements. Although the City currently publishes certain monthly financial reports that are available upon written request from the City to the extent permitted by applicable law, the City reserves the right to discontinue or modify this practice at any time, and the City does not plan to issue any other updates or revisions to any forward-looking statements if or when its expectations, or events, conditions or circumstances on which such statements are based, occur, or if actual results, performance or achievements are materially different from any results, performance or achievements described or implied by such forward-looking statements.**

The Underwriters have provided the following sentence for inclusion in this Official Statement: The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities 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 prices and other terms respecting the offering and sale of the Series 2020 Bonds may be changed from time to time by the Underwriters after the Series 2020 Bonds are released for sale, and the Series 2020 Bonds may be offered and sold at prices other than the initial offering prices, including sales to dealers who may sell the Series 2020 Bonds into investment accounts.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS THAT STABILIZE OR MAINTAIN THE MARKET PRICES OF THE SERIES 2020 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

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**CITY OF HOUSTON, TEXAS**

**ELECTED OFFICIALS**

Sylvester Turner, Mayor

Chris B. Brown, City Controller

**CITY COUNCIL**

*Council Member,*  
District A .....Amy Peck

*\*Council Member,*  
District B..... Jerry Davis

*Council Member,*  
District C.....Abbie Kamin

*Council Member,*  
District D ..... Carolyn Evans-Shabazz

*Council Member,*  
District E..... Dave Martin

*Council Member,*  
District F ..... Tiffany D. Thomas

*Council Member,*  
District G ..... Greg Travis

*Council Member,*  
District H .....Karla Cisneros

*Council Member,*  
District I..... Robert Gallegos

*Council Member,*  
District J ..... Edward Pollard

*Council Member,*  
District K ..... Martha Castex-Tatum

*Council Member, At-Large*  
Position 1 .....Mike Knox

*Council Member, At-Large*  
Position 2 ..... David Robinson

*Council Member, At-Large*  
Position 3 .....Michael Kubosh

*Council Member, At-Large*  
Position 4 ..... Letitia Plummer

*Council Member, At-Large*  
Position 5 ..... Sallie Alcorn

**APPOINTED OFFICIALS**

City Attorney .....Ronald C. Lewis  
Deputy City Controller ..... Charisse Page Mosely  
Director, Department of Finance ..... Tantri Emo  
Director of Aviation, Houston Airport System .....Mario C. Diaz  
Interim City Secretary..... Pat J. Daniel

**ADVISORS AND CONSULTANTS**

Co-Financial Advisors ..... Masterson Advisors LLC  
The RSI Group LLC  
Co-Bond Counsel..... Bracewell LLP  
West & Associates L.L.P.  
Tax Counsel..... Bracewell LLP  
Special Disclosure Co-Counsel.....Haynes and Boone, LLP  
Law Offices of Francisco G. Medina

\* See "THE CITY AND CITY FINANCIAL INFORMATION – Governmental Structure" for a discussion of the litigation related to the election of a successor to the District B Council position.

**FINANCING WORKING GROUP**

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Greg Carrington  
Scott Feldman  
Steve Francis

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Joe Crawford  
Rahat Huq

Department of Finance..... Melissa Dubowski  
Jaime Alvarez  
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Fahad Gulzar  
Sunita Patel

Office of the City Controller..... Shannan Nobles  
Han Au  
Vernon Lewis  
Linje Zhu

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**OFFICIAL STATEMENT**

**\$863,675,000**  
**CITY OF HOUSTON, TEXAS**  
**AIRPORT SYSTEM**



**\$131,620,000**  
**SUBORDINATE LIEN REVENUE**  
**REFUNDING BONDS,**  
**SERIES 2020A (AMT)**

**\$71,565,000**  
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**\$660,490,000**  
**SUBORDINATE LIEN REVENUE**  
**REFUNDING BONDS,**  
**SERIES 2020C (TAXABLE)**

**INTRODUCTION**

This Official Statement, including the cover page, schedules and appendices hereto, is provided to furnish information in connection with the offer and sale by the City of Houston, Texas (the "City") of its Airport System Subordinate Lien Revenue Refunding Bonds, Series 2020A (AMT) (the "Series 2020A Bonds"), its Airport System Subordinate Lien Revenue Refunding Bonds, Series 2020B (Non-AMT) (the "Series 2020B Bonds" and, together with the Series 2020A Bonds, the "Tax-Exempt Bonds"), and its Airport System Subordinate Lien Revenue Refunding Bonds, Series 2020C (Taxable) (the "Taxable Series 2020C Bonds" or the "Taxable Bonds"). The Tax-Exempt Bonds and the Taxable Bonds together are referred to herein as the "Series 2020 Bonds." The Series 2020 Bonds are being issued pursuant to Chapters 1201, 1207, 1371 and 1503, Texas Government Code, as amended, a master ordinance adopted by the City Council of the City (the "City Council") on November 9, 2016 (the "Master Ordinance"), a supplemental ordinance adopted by the City Council on September 2, 2020 (the "Supplemental Ordinance"), and one or more pricing certificates (collectively, the "Officers Pricing Certificate") executed by the pricing officers pursuant to the Supplemental Ordinance; collectively, the Master Ordinance, the Supplemental Ordinance and the Officers Pricing Certificate are referred to herein as the "Ordinance."

The Houston Airport System, an enterprise system of the City, is currently comprised of the following facilities, each of which the City manages, owns and operates through the Houston Airport System: George Bush Intercontinental Airport/Houston ("Intercontinental"), William P. Hobby Airport ("Hobby") and Ellington Airport ("Ellington"). United Airlines, Inc. ("United") is the largest air carrier operating at Intercontinental. Southwest Airlines, Inc. ("Southwest") is the largest air carrier operating at Hobby. For additional information about the Houston Airport System, see "THE HOUSTON AIRPORT SYSTEM." See "- COVID-19 Pandemic" below.

The City is the fourth most populous city in the nation and the most populous city in the State of Texas (the "State") and has a land area of approximately 675 square miles. According to the most recent United States Census Bureau estimate, the City's population was approximately 2.3 million in 2019. The Census Bureau's 2019 estimate for the population of the nine-county metropolitan statistical area ("Houston-The Woodlands-Sugar Land MSA"), the fifth largest metropolitan statistical area in the United States, was 7.1 million. The City is located on the Southeast Texas Gulf Coastal Plains, approximately 50 miles from the Gulf of Mexico. The City is a major corporate and international financial center. Leading industries include energy, engineering and construction, real estate, aerospace, commerce, medicine and health care, transportation, biotechnology and computer technology. See "- COVID-19 Pandemic" below.

Descriptions and summaries of the Series 2020 Bonds, the Houston Airport System and the Ordinance are included in this Official Statement. References herein to the Series 2020 Bonds and the Ordinance are qualified in their entirety by reference to the Ordinance. Houston Airport System Fund Financial Statements for the Fiscal Year ended June 30, 2019 are included as APPENDIX A. Excerpts of the Master Ordinance and a glossary of defined terms are included as APPENDIX B-1 and, unless otherwise specifically defined, capitalized terms used herein have the meanings set out in APPENDIX B-1. APPENDIX B-2 contains proposed amendments to the Master Ordinance that were adopted as part of the Supplemental Ordinance and shall be binding upon all Owners of the Series 2020 Bonds upon the Amendment Effective Date (as defined herein).

Attached as APPENDIX C are the forms of opinions of Co-Bond Counsel and Tax Counsel. Attached as APPENDIX D is a list of continuing disclosure schedules included in this Official Statement. Attached as APPENDIX E is information relating to The Depository Trust Company, New York, New York ("DTC") and its book-entry system applicable to the Series 2020 Bonds. Attached as APPENDIX F is a description of the distribution agreements entered into by certain of the Underwriters.

## **Senior Lien Obligations and Inferior Lien Bonds**

The lien on Net Revenues securing the Series 2020 Bonds and other Subordinate Lien Bonds is (i) junior and subordinate to the lien on Net Revenues securing the Outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued and (ii) senior to the lien on Net Revenues securing any Inferior Lien Bonds hereafter issued.

The City maintains a commercial paper program of Senior Lien Notes supported by a direct pay letter of credit issued by Sumitomo Mitsui Banking Corporation, acting through its New York Branch, which expires in March 2025, in the original stated amount of \$375,890,411 (representing an amount equal to the maximum aggregate principal amount at any time Outstanding of \$350 million plus an amount equal to 270 days interest at the maximum rate described therein). As of September 1, 2020, \$150.97 million of Senior Lien Notes were outstanding. The City has agreed not to issue Senior Lien Notes in an amount that would cause the Senior Lien Note Reserve Requirement to exceed the amount on deposit in the Senior Lien Note Reserve Fund Participant Account, which, as of April 1, 2020, limited the aggregate principal amount of Senior Lien Notes Outstanding at any time to the maximum amount of \$180 million. All or a portion of the currently Outstanding Senior Lien Notes will be refunded with proceeds of the Series 2020A Bonds. See “PURPOSE AND PLAN OF FINANCING.”

There currently are no Senior Lien Bonds Outstanding.

Additionally, the lien on Net Revenues securing Subordinate Lien Bonds is senior to the lien securing Inferior Lien Bonds. No Inferior Lien Bonds are Outstanding. In February 2020, the City entered into an amended and restated forward bond purchase agreement with Royal Bank of Canada that establishes a mechanism for the City to issue up to \$450 million of Airport System Inferior Lien Revenue Bonds, which agreement expires in February 2027. No amounts have been issued pursuant to the amended and restated forward bond purchase agreement, and as of the date hereof, no amounts are expected to be issued pursuant thereto.

See “DEBT SERVICE REQUIREMENTS OF HOUSTON AIRPORT SYSTEM OBLIGATIONS – Schedule 8: Houston Airport System Outstanding Debt.”

## **COVID-19 Pandemic**

Investors are urged to read this Official Statement in its entirety, and the information described herein should be read in conjunction with the sections entitled “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” and “INVESTMENT CONSIDERATIONS.” The section entitled “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” describes the federal, state and local response to the COVID-19 pandemic and the material impact to the Houston Airport System, including reductions in traffic and passenger enplanements.

## **PURPOSE AND PLAN OF FINANCING**

### **The Series 2020 Bonds**

Proceeds of the sale of the Series 2020A Bonds will be used to (i) refund certain Outstanding Airport System Senior Lien Notes, as more specifically described in SCHEDULE I (the “Refunded Notes”) and (ii) pay related costs of issuance of the Series 2020A Bonds.

Proceeds of the sale of the Series 2020B Bonds will be used to (i) refund certain Outstanding Airport System Subordinate Lien Bonds, as more specifically described in SCHEDULE I (the “2020B Refunded Bonds”) and (ii) pay related costs of issuance of the Series 2020B Bonds.

Proceeds of the sale of the Taxable Series 2020C Bonds will be used to (i) refund and defease certain Outstanding Airport System Subordinate Lien Bonds, as more specifically described in SCHEDULE I (the “2020C Refunded Bonds”) and, together with the 2020B Refunded Bonds, the “Refunded Bonds”) and (ii) pay related costs of issuance of the Taxable Series 2020C Bonds.

### **The Refunded Notes**

A portion of the proceeds of the Series 2020A Bonds, together with other available funds of the City, will be deposited with U.S. Bank National Association, as the issuing and paying agent for the Refunded Notes (the “Refunded Notes Paying Agent”) and used to pay the Refunded Notes on or about the Date of Delivery.

The sufficiency of the deposit to pay the Refunded Notes will be confirmed through a certificate delivered by the Co-Financial Advisors and acknowledged by the Refunded Notes Paying Agent, thereby confirming that the City will have



made firm banking and financial arrangements for the discharge and final payment of the Refunded Notes pursuant to the provisions of Chapter 1207, Texas Government Code, as amended.

### The Refunded Bonds

The paying agent and tender agent for the 2020B Refunded Bonds will cause the redemption of the 2020B Refunded Bonds by making a redemption drawing on the letter of credit relating to the 2020B Refunded Bonds on the redemption date. A portion of the proceeds of the Series 2020B Bonds, together with other available funds of the City will be deposited with the paying agent and tender agent for the 2020B Refunded Bonds to reimburse the letter of credit provider for the redemption drawing.

A portion of the proceeds of the Taxable Series 2020C Bonds, together with other available funds of the City will be used to purchase a portfolio of obligations (the "Escrowed Securities") authorized under Texas law and the ordinances authorizing the 2020C Refunded Bonds to be deposited, along with certain uninvested proceeds of the Taxable Series 2020C Bonds, in one or more escrow funds or accounts (collectively, the "Escrow Fund") with The Bank of New York Mellon Trust Company, National Association, the escrow agent for the Refunded Bonds (the "Escrow Agent") pursuant to an escrow agreement between the City and the Escrow Agent (the "Escrow Agreement"). The maturing principal of and interest on the Escrowed Securities will be sufficient, together with other funds deposited to the Escrow Fund, to pay, when due, the principal of and interest on the 2020C Refunded Bonds.

The Verification Agents will verify the accuracy of the mathematical computations of the adequacy of the available funds (i) deposited for the repayment of the principal portion of the redemption drawing on the letter of credit relating to the 2020B Refunded Bonds and (ii) deposited in the Escrow Fund to provide for the payment of principal and interest on the 2020C Refunded Bonds. See "VERIFICATION OF MATHEMATICAL ACCURACY."

By making the deposits described above as required by the ordinances authorizing the Refunded Bonds, the Ordinance and the Escrow Agreement, the City will have made firm banking and financial arrangements for the discharge and final payment of the Refunded Bonds pursuant to the provisions of Chapter 1207, Texas Government Code, as amended. Thereafter, the Refunded Bonds will be deemed to be fully paid and no longer outstanding and the lien on and pledge of Net Revenues securing the Refunded Bonds will be deemed to have been defeased, except for the purpose of being paid from the funds provided therefor.

### SOURCES AND USES OF FUNDS

The following table summarizes the estimated sources and uses of proceeds of the Series 2020 Bonds:

	<u>Series 2020A Bonds</u>	<u>Series 2020B Bonds</u>	<u>Taxable Series 2020C Bonds</u>	<u>Total</u>
<b>SOURCES OF FUNDS:</b>				
Par Amount .....	131,620,000.00	71,565,000.00	660,490,000.00	863,675,000.00
Original Issue Premium.....	19,995,314.15	20,660,649.95	0.00	40,655,964.10
Issuer Contribution.....	0.00	0.00	9,315,609.31	9,315,609.31
<b>TOTAL SOURCES .....</b>	<b>151,615,314.15</b>	<b>92,225,649.95</b>	<b>669,805,609.31</b>	<b>913,646,573.41</b>
<b>USES OF FUNDS:</b>				
Deposit to Refunded Notes Paying Agent <sup>(1)</sup> .....	150,973,000.00	0.00	0.00	150,973,000.00
Deposit to Paying Agent/Tender Agent for 2020B Refunded Bonds <sup>(2)</sup> .....	0.00	91,905,000.00	0.00	91,905,000.00
Deposit to Refunded Bonds Escrow Fund <sup>(3)</sup> .....	0.00	0.00	666,890,663.93	666,890,663.93
Underwriters' Discount.....	439,880.65	207,153.38	1,947,768.09	2,594,802.12
Costs of Issuance <sup>(4)</sup> .....	202,433.50	113,496.57	967,177.29	1,283,107.36
<b>TOTAL USES.....</b>	<b>151,615,314.15</b>	<b>92,225,649.95</b>	<b>669,805,609.31</b>	<b>913,646,573.41</b>

<sup>(1)</sup> The interest due on the Refunded Notes will be deposited with the Refunded Notes Paying Agent by the City from other available funds on or before the Date of Delivery.

<sup>(2)</sup> The interest portion of the redemption drawing on the letter of credit relating to the 2020B Refunded Bonds will be deposited with the Paying Agent/Tender Agent for the 2020B Refunded Bonds by the City from other available funds on or before the Date of Delivery.

<sup>(3)</sup> The interest due on the 2020C Refunded Bonds will be deposited with the Escrow Agent by the City from other available funds on or before the Date of Delivery.

<sup>(4)</sup> Includes legal fees, rating agency fees, fees of the Paying Agent/Registrar, Refunded Notes Paying Agent, Escrow Agent and Paying Agent/Tender Agent for 2020B Refunded Bonds, and other costs of issuance. Also may include rounding amounts.

## THE SERIES 2020 BONDS

### General

The Series 2020 Bonds are Subordinate Lien Bonds that, together with all other Subordinate Lien Bonds from time to time Outstanding, are payable from, and equally and ratably secured by, a lien on the Net Revenues of the Houston Airport System. The lien on Net Revenues securing Subordinate Lien Bonds is subordinate and junior to the superior lien on the Net Revenues securing the Senior Lien Obligations. See “INTRODUCTION – Senior Lien Obligations and Inferior Lien Bonds.”

The Series 2020 Bonds will mature in the principal amounts and on the dates indicated on the inside cover pages of this Official Statement. Interest on the Series 2020 Bonds will accrue from the Date of Delivery (as defined on the cover page), be payable on each January 1 and July 1, commencing January 1, 2021, until maturity or earlier redemption, and be calculated on the basis of a 360-day year consisting of twelve 30-day months. The Series 2020 Bonds will be issued in fully registered form in denominations of \$5,000 or any integral multiple thereof (“Authorized Denominations”).

Principal of the Series 2020 Bonds is payable when due upon presentation and surrender thereof at the principal office of the Paying Agent/Registrar. Interest on the Series 2020 Bonds will be payable to the Registered Owner whose name appears in the registration books for the Series 2020 Bonds (the “Register”) maintained by the Paying Agent/Registrar at the close of business on the 15th day of the calendar month immediately preceding the applicable interest payment date and shall be payable by the Paying Agent/Registrar by check or draft sent by United States mail, first class postage prepaid. Accrued interest payable at maturity of the Series 2020 Bonds will be paid upon presentation and surrender of such Series 2020 Bonds at the principal office of the Paying Agent/Registrar.

### Redemption

#### *Optional Redemption*

The Series 2020A Bonds maturing on or after July 1, 2031 shall be subject to redemption prior to stated maturity at the option of the City on July 1, 2030 or any date thereafter, in whole or in part, at a price equal to the principal amount of the Series 2020A Bonds to be redeemed, plus the accrued interest thereon to (but not including) the date fixed for redemption.

The Series 2020B Bonds are not subject to redemption prior to maturity.

The Taxable Series 2020C Bonds maturing on or after July 1, 2031 shall be subject to redemption prior to stated maturity at the option of the City on July 1, 2030 or any date thereafter, in whole or in part, at a price equal to the principal amount of the Taxable Series 2020C Bonds to be redeemed, plus the accrued interest thereon to (but not including) the date fixed for redemption.

#### *Mandatory Sinking Fund Redemption of the Series 2020A Bonds*

The Series 2020A Bonds maturing on July 1 in the year 2047 (the “Term Bonds”) are being issued as term bonds and are subject to mandatory sinking fund redemption prior to their scheduled maturity in the following amounts (subject to reduction as hereinafter provided), on the following dates (“Mandatory Redemption Dates”), at a price equal to the principal amount of the Series 2020A Bonds to be redeemed plus accrued interest to (but not including) the applicable Mandatory Redemption Date, subject to the conditions set forth below:

#### **\$58,905,000 Series 2020A Term Bonds Maturing July 1, 2047**

Mandatory Redemption Date (July 1)	Principal Amount to be Redeemed
2041	\$7,460,000
2042	7,755,000
2043	8,065,000
2044	8,390,000
2045	8,725,000
2046	9,075,000
2047 (maturity)	9,435,000

On or before 30 days prior to each Mandatory Redemption Date set forth above, the Paying Agent/Registrar shall (i) determine the principal amount of such Term Bonds that must be mandatorily redeemed on such Mandatory Redemption Date, after taking into account deliveries for cancellation and optional redemptions, (ii) select, by lot or other customary

random method, the Term Bonds or portions of Term Bonds of such maturity to be mandatorily redeemed on such Mandatory Redemption Date, and (iii) give notice of such redemption as provided in the Ordinance. The principal amount of any Term Bonds to be mandatorily redeemed on a Mandatory Redemption Date shall be reduced by the principal amount of such Term Bonds which, by the 45th day prior to such Mandatory Redemption Date, either have been purchased in the open market and delivered or tendered for cancellation by or on behalf of the City to the Paying Agent/Registrar or optionally redeemed by the City and which, in either case, have not previously been made the basis for a reduction under this sentence.

### ***Partial Redemption***

The Series 2020 Bonds may be redeemed in part within a maturity only in integral multiples of \$5,000. If a Series 2020 Bond subject to redemption is in a denomination larger than \$5,000, a portion of such Series 2020 Bond may be redeemed, but only in integral multiples of \$5,000. Upon presentation and surrender of any Series 2020 Bond for redemption in part, the Paying Agent/Registrar, in accordance with the provisions of the Ordinance, shall authenticate and deliver in exchange therefor Series 2020 Bonds of like maturity and interest rate in an aggregate principal amount equal to the unredeemed portion of the Series 2020 Bonds so presented and surrendered.

### ***Selection of Bonds to be Redeemed***

In the case of any optional redemption in part of the Series 2020 Bonds, the City shall select the stated maturities to be redeemed.

If less than all of the Series 2020A Bonds of a stated maturity are to be optionally redeemed, the Paying Agent/Registrar shall select the particular Series 2020A Bonds of such stated maturity to be redeemed in such manner as it deems fair and appropriate.

If less than all the Taxable Series 2020C Bonds of a stated maturity are to be optionally redeemed, the particular Taxable Series 2020C Bonds or portions thereof to be redeemed shall be allocated on a pro rata pass-through distribution of principal basis, and, if the Taxable Series 2020C Bonds are registered in book-entry only form and so long as Cede & Co. or its registered assigns or a successor Securities Depository is the sole registered owner of such Taxable Series 2020C Bonds, in accordance with the operational arrangements of Cede & Co. or its registered assigns or the successor Securities Depository then in effect. For purposes of calculation of the "pro rata pass-through distribution of principal," "pro rata" means, for any amount of principal to be paid, the application of a fraction to each denomination of the respective stated maturity of Taxable Series 2020C Bonds where (a) the numerator of which is equal to the amount due to the respective bondholders on a payment date, and (b) the denominator of which is equal to the total original par amount of the respective stated maturity of Taxable Series 2020C Bonds.

The City intends that redemption allocations made by DTC be made on a pro rata pass-through distribution of principal basis as described above. However, neither the City nor the Underwriters can provide any assurance that DTC, DTC's direct and indirect participants or any other intermediary will allocate the redemption of Taxable Series 2020C Bonds on such basis.

### ***Notice of Redemption***

If any of the Series 2020 Bonds are called for optional redemption, the Paying Agent/Registrar shall give notice, in the name of the City, of the redemption of such Series 2020 Bonds, which notice shall (i) specify the Series 2020 Bonds to be redeemed, the redemption date, the redemption price and the place or places where amounts due upon such redemption will be payable (which shall be the designated principal corporate trust office of the Paying Agent/Registrar) and, if less than all of the Series 2020 Bonds are to be redeemed, the portions of the Series 2020 Bonds to be redeemed, (ii) state any condition to such redemption and (iii) state that on the redemption date and upon the satisfaction of any such condition, the Series 2020 Bonds to be redeemed shall cease to bear interest. CUSIP number identification shall accompany all redemption notices. Such notice may set forth any additional information relating to such redemption. Such notice shall be given by mail, postage prepaid, at least 30 days but not more than 60 days prior to the date fixed for redemption to each Registered Owner of Series 2020 Bonds to be redeemed at its address shown on the registration books kept by the Paying Agent/Registrar; provided, however, that failure to give such notice to any Registered Owner or any defect in such notice shall not affect the validity of the proceedings for the redemption of any of the other Series 2020 Bonds.

Any notice given as provided herein shall be conclusively presumed to have been duly given, whether or not the Registered Owner or Beneficial Owner receives such notice. When the Series 2020 Bonds have been called for redemption in whole or in part, due provision has been made to redeem the same as provided in the Series 2020 Bonds and in the Ordinance, and any condition to redemption, as stated in the notice of redemption, has been satisfied, the Series 2020 Bonds

or portions thereof to be so redeemed shall no longer be regarded as Outstanding except for the purpose of receiving payment solely from the funds so provided for redemption, and the rights of the Registered Owners to collect interest that would otherwise accrue after the redemption date on any Series 2020 Bond or portion thereof called for redemption shall terminate on the date fixed for redemption.

### **Ownership**

The City, the Paying Agent/Registrar, and any other person may treat the person in whose name any Series 2020 Bond is registered as the absolute Owner of such Series 2020 Bond for the purpose of making and receiving payment of the principal thereof and premium, if any, thereon, and for the purpose of making and receiving payment of the interest thereon, and for all other purposes, whether or not such Series 2020 Bond is overdue, and neither the City nor the Paying Agent/Registrar shall be bound by any notice or knowledge to the contrary. All payments made to the person deemed to be the Owner of any Series 2020 Bond in accordance with the Ordinance shall be valid and effectual and shall discharge the liability of the City and the Paying Agent/Registrar upon such Series 2020 Bond to the extent of the sums paid.

### **Transfers and Exchanges**

Beneficial ownership of the Series 2020 Bonds registered in the name DTC, will initially be transferred as described under APPENDIX E – DEPOSITORY TRUST COMPANY.

So long as any Series 2020 Bonds remain Outstanding, the Paying Agent/Registrar shall keep the Register at its designated principal corporate trust office in which, subject to such reasonable regulations as it may prescribe, the Paying Agent/Registrar shall provide for the registration and transfer of the Series 2020 Bonds in accordance with the terms of the Ordinance. A copy of the Register shall be maintained at an office of the Paying Agent/Registrar in Texas.

Each Series 2020 Bond shall be transferable only upon the presentation and surrender thereof at the designated principal corporate trust office of the Paying Agent/Registrar, duly endorsed for transfer, or accompanied by an assignment duly executed by the Registered Owner or his authorized representative in form satisfactory to the Paying Agent/Registrar. Upon due presentation and surrender of any Series 2020 Bond for transfer, the Paying Agent/Registrar is required to authenticate and deliver in exchange therefor, within 72 hours after such presentation and surrender, a new Series 2020 Bond or Series 2020 Bonds, registered in the name of the transferee or transferees, in Authorized Denominations and of the same series, maturity and aggregate principal amount and bearing interest at the same rate as the Series 2020 Bond or Series 2020 Bonds so presented and surrendered.

If the Series 2020 Bonds are not in the DTC book-entry-only registration system, all Series 2020 Bonds shall be exchangeable upon the presentation and surrender thereof at the designated corporate trust office of the Paying Agent/Registrar for a Series 2020 Bond or Series 2020 Bonds of the same series, maturity and interest rate and in any Authorized Denomination, in an aggregate principal amount equal to the unpaid principal amount of the Series 2020 Bond or Series 2020 Bonds presented for exchange.

Each Series 2020 Bond delivered in accordance with the Ordinance shall be entitled to the benefits and security of the Ordinance to the same extent as the Series 2020 Bond or Series 2020 Bonds in lieu of which such Series 2020 Bond is delivered.

The City or the Paying Agent/Registrar may require DTC or any subsequent Registered Owner of any Series 2020 Bond to pay a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with the transfer or exchange of such Series 2020 Bond.

The Paying Agent/Registrar shall not be required to transfer or exchange any Series 2020 Bond during the 45-day period prior to the date fixed for redemption; provided, however, that such restriction shall not apply to the transfer or exchange by the Registered Owner of the unredeemed portion of any Series 2020 Bond called for redemption in part.

## **SECURITY FOR THE SERIES 2020 BONDS**

### **General**

The Series 2020 Bonds are special obligations of the City that, together with the Outstanding Subordinate Lien Bonds and any Additional Subordinate Lien Bonds hereafter issued, are payable from and are equally and ratably secured by a lien on the Net Revenues of the Houston Airport System, the Subordinate Lien Bond Interest and Sinking Fund and the Subordinate Lien Bond Reserve Fund, all as defined and provided in the Ordinance. See APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE. The lien on Net Revenues securing the Series 2020

Bonds and other Subordinate Lien Bonds is (i) junior and subordinate to the lien on Net Revenues securing the Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued and (ii) senior to the lien on Net Revenues securing any Inferior Lien Bonds hereafter issued.

Passenger Facility Charge Revenues (“PFC Revenues”) are not pledged to the payment of the Series 2020 Bonds or any Subordinate Lien Bonds; however, periodically, the Houston Airport System irrevocably commits PFC Revenues to the Subordinate Lien Bond Interest and Sinking Fund for the purpose of paying eligible debt service attributable to approved PFC projects. The Master Ordinance provides that the calculation of Debt Service Requirements excludes the amount of PFC Revenues irrevocably committed therefor. See “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Sources of Revenues – *PFC Revenues*” and “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Schedule 5: Selected Financial Information.”

**The Series 2020 Bonds do not constitute a general obligation of the City. Owners of the Series 2020 Bonds shall never have the right to demand payment of principal of, interest on or any redemption premium on the Series 2020 Bonds from any funds raised or to be raised by taxation.**

In addition to the definitions described below, see APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE for excerpts of the Master Ordinance, which further details the security for the Series 2020 Bonds.

### *Net Revenues*

Net Revenues means that portion of the Gross Revenues remaining after the deduction of the Operation and Maintenance Expenses of the Houston Airport System.

### *Gross Revenues*

Subject to the exclusions noted below, Gross Revenues means all income and revenues derived directly or indirectly by the City from the operation and use of and otherwise pertaining to the Houston Airport System, or any part thereof, whether resulting from extensions, enlargements, repairs, betterments or other improvements to the Houston Airport System, or otherwise, and includes, except to the extent hereinafter expressly excluded, all revenues received by the City from the Houston Airport System, including, without limitation, all rentals, rates, fees and other charges for the use of the Houston Airport System, or for any service rendered by the City in the operation thereof, interest and other income realized from the investment or deposit of amounts credited to any fund required to be maintained pursuant to the Master Ordinance or any other ordinance authorizing the issuance of Senior Lien Obligations, Subordinate Lien Bonds or Inferior Lien Bonds (collectively, the “Airport Obligations”).

Gross Revenues expressly exclude: (1) proceeds of any Airport Obligations; (2) interest or other investment income derived from proceeds of Airport Obligations deposited to the credit of any construction fund, or applied to fund capitalized interest, or interest or investment income required to be retained in the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Reserve Fund, the Operation and Maintenance Reserve Fund or any escrow fund in order to accumulate therein any amount or balance required to be accumulated or maintained therein pursuant to any ordinance authorizing any series of Airport Obligations; (3) any moneys received as grants, appropriations, or gifts, the use of which is limited by the grantor or donor to the construction or acquisition of the Houston Airport System facilities, except to the extent any such moneys shall be received as payments for the use of the Houston Airport System facilities; (4) any revenues derived from any Special Facilities that are pledged to the payment of Special Facilities Bonds; (5) insurance proceeds other than loss of use or business interruption insurance proceeds; (6) the proceeds of any passenger facility charge or other per-passenger charge as may be authorized under federal law including, but not limited to, PFC Revenues; (7) sales and other taxes collected by the Houston Airport System on behalf of the State of Texas and any other taxing entities; (8) Federal Payments received by the Houston Airport System unless the City first receives an opinion from nationally recognized bond counsel to the effect that such payments, if included in Gross Revenues, would not cause the interest on the Airport Obligations to be includable within the gross income of the Owners thereof for federal income tax purposes; (9) the net proceeds received by the City from the disposition of any Houston Airport System property; (10) any Excluded Fee and Charge Revenues; and (11) any Taxable Bond Credit Revenues.

### *Operation and Maintenance Expenses*

Subject to the exclusions noted below, Operation and Maintenance Expenses means all reasonable and necessary current expenses of the City, paid or accrued, of operating, maintaining and repairing the Houston Airport System including, without limitation, reasonably allocated City overhead expenses relating to the administration, operation and maintenance of the Houston Airport System; insurance and fidelity bond premiums; payments to pension and other funds and to any self-

insurance fund not in excess of premiums that would otherwise be required for such insurance; any general and excise taxes or other governmental charges imposed by entities other than the City; costs of contractual and professional services, labor, materials and supplies for current operations, including the costs of such direct City services rendered to the Houston Airport System as are requested from the City by the Houston Airport System and as are reasonably necessary for the operation of the Houston Airport System; costs of issuance of Airport Obligations (except to the extent paid from the proceeds thereof); fiduciary costs; costs of collecting and refunding Gross Revenues; utility costs; any lawful refunds of any Gross Revenues; and all other administrative, general and commercial expenses. Operation and Maintenance Expenses include only those current expenses due or payable within the next 30 days.

The following expenses are specifically excluded from the definition of Operation and Maintenance Expenses: (1) any allowance for depreciation; (2) costs of capital improvements; (3) reserves for major capital improvements, Houston Airport System operations, maintenance or repair; (4) any allowance for redemption of, or payment of interest or premium on, Airport Obligations; (5) any liabilities incurred in acquiring or improving properties of the Houston Airport System; (6) expenses of lessees under Special Facilities Leases and operation and maintenance expenses pertaining to Special Facilities to the extent they are required to be paid by such lessees pursuant to the terms of the Special Facilities Leases; (7) any charges or obligations incurred in connection with any lawful Houston Airport System purpose, including the lease, acquisition, operation or maintenance of any facility or property benefiting the Houston Airport System, provided that the payment of such charges or obligations is expressly agreed by the payee to be payable solely from proceeds of the Airports Improvement Fund; (8) liabilities based upon the City's negligence or other grounds not based on contract; and (9) so long as Federal Payments are excluded from Gross Revenues, an amount of expenses that would otherwise constitute Operation and Maintenance Expenses for such period equal to the Federal Payments for such period.

### ***Perfection of Security Interest in Revenues***

The Master Ordinance provides that pursuant to Chapter 1208, Texas Government Code, the lien on Net Revenues created under the Master Ordinance is valid, effective and perfected.

### **Bondholders' Remedies**

The Ordinance provides that if the City defaults in the payment of principal of or interest on any Subordinate Lien Bonds, including the Series 2020 Bonds, or the performance of any duty or covenant provided by law or in the Ordinance, Owners of such Subordinate Lien Bonds, including the Series 2020 Bonds, may pursue all legal remedies afforded by the Constitution and the laws of the State of Texas to compel the City to remedy such default and to prevent further default or defaults. See APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.

The Ordinance neither appoints nor makes any provision for the appointment of a trustee to protect the rights of Owners of the Series 2020 Bonds. Furthermore, the Ordinance does not provide for acceleration of maturity of the Series 2020 Bonds or for foreclosure on Net Revenues or possession of Net Revenues by a trustee or agent for Owners of the Series 2020 Bonds or for operation of the Houston Airport System by an independent third party in the event of default.

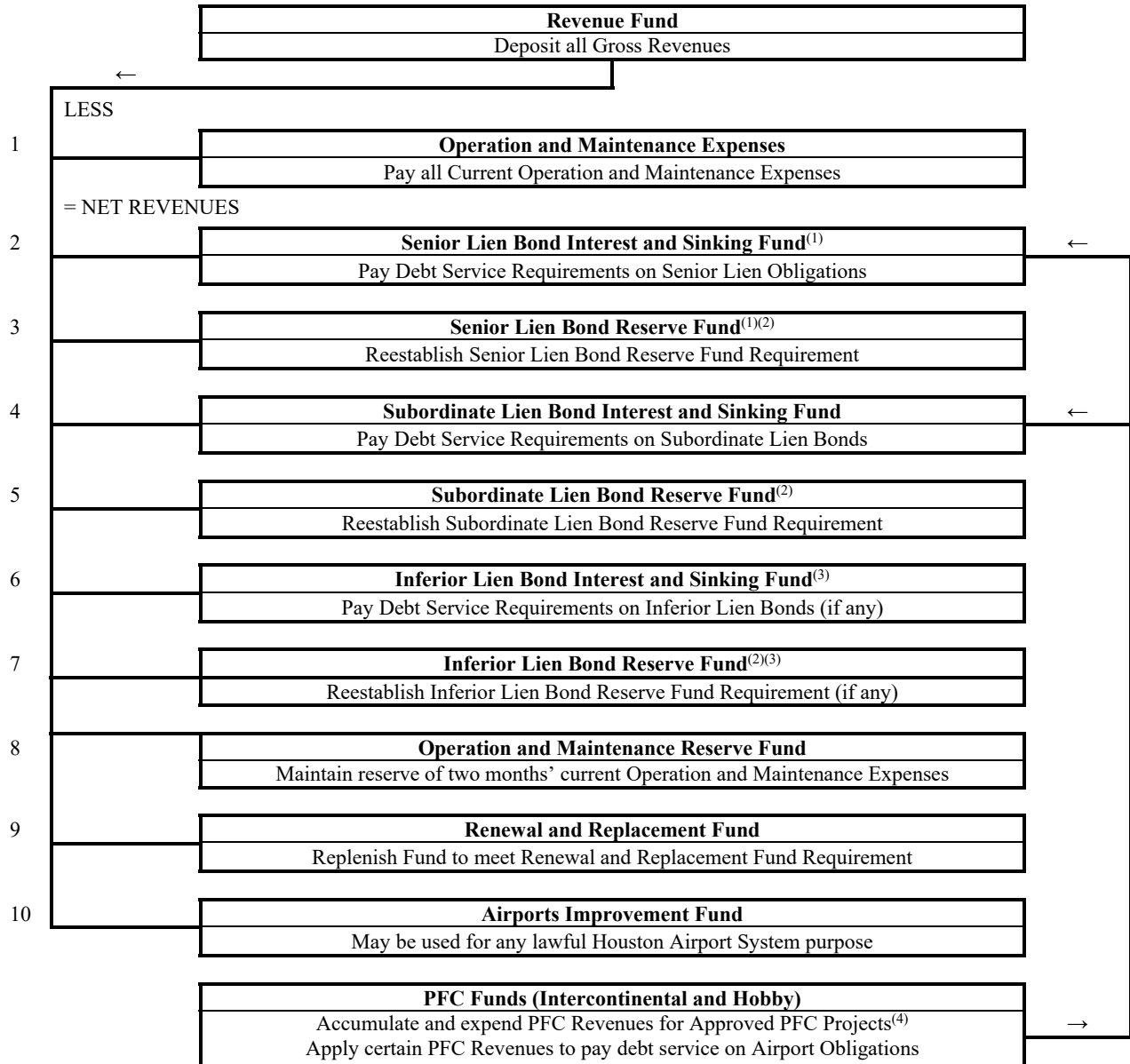
No lien has been placed on any of the physical properties comprising the Houston Airport System to secure the payment of or interest on the Series 2020 Bonds. Moreover, in the event of default, the Owners of the Series 2020 Bonds have no right or claim under the laws of the State of Texas against the Houston Airport System or any property of the City other than their right to receive payment from Net Revenues and certain Funds maintained pursuant to the Ordinance. Owners of the Series 2020 Bonds have no right to demand payment of principal of or interest or premium, if any, on the Series 2020 Bonds from any funds raised or to be raised by taxation or from any funds on deposit in any of the special Funds described in the Ordinance, except the Subordinate Lien Bond Interest and Sinking Fund, and the applicable account of the Subordinate Lien Bond Reserve Fund. Further, unless sovereign immunity is expressly waived by the Texas Legislature or it is determined that the provision of airport services is a proprietary rather than a governmental function of the City, local governmental immunity would be available as a defense against suits for money damages against the City or the Houston Airport System in connection with the Series 2020 Bonds. The City will not waive sovereign immunity against suit in connection with the issuance of the Series 2020 Bonds. Accordingly, the only practical remedy in the event of a default may be a mandamus proceeding to compel the City to increase rates and charges reasonably required for the use and service of the Houston Airport System or perform its other obligations under the Ordinance, including the deposit of the Gross Revenues into the special Funds provided in the Ordinance and the application of such Gross Revenues and such special Funds in the manner required in the Ordinance. Such remedy may need to be enforced on a periodic basis because maturity of the Series 2020 Bonds is not subject to acceleration. In addition, the City's ability to comply with the Rate Covenant will be limited by contractual and competitive supply and demand constraints. See "COVENANTS AND TERMS OF THE ORDINANCE – Rate Covenant."

The enforcement of a claim for payment of principal of or interest on the Series 2020 Bonds and the City's other obligations with respect to the Series 2020 Bonds are subject to the applicable provisions of the federal bankruptcy laws and to any other similar laws affecting the rights of creditors of political subdivisions generally. The City may seek relief from its creditors under Chapter 9 of the U.S. Bankruptcy Code ("Chapter 9"); however, Chapter 9 recognizes a security interest in a specifically pledged source of revenues, such as the Net Revenues. Chapter 9 also includes an automatic stay provision that would prohibit, without Bankruptcy Court approval, the prosecution of any other legal action by creditors or bondholders against an entity that seeks protection under Chapter 9. Therefore, should the City avail itself of Chapter 9 protection from creditors, the ability to enforce any other remedies available to the registered owners, other than for the pledge of Net Revenues securing the Series 2020 Bonds, would be subject to the approval of the Bankruptcy Court (which could require that the action be heard in Bankruptcy Court instead of other federal or state court); and the U.S. Bankruptcy Code provides for broad discretionary powers of a Bankruptcy Court in administering any proceeding brought before it.

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## Flow of Funds

Below is a presentation of the application of revenues under the Master Ordinance. For more information about the Houston Airport System's revenues, see "SECURITY FOR THE SERIES 2020 BONDS" and APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.



(1) There currently are no Senior Lien Bonds Outstanding; however, the City maintains a commercial paper program of Senior Lien Notes. See "INTRODUCTION – Senior Lien Obligations and Inferior Lien Bonds."

(2) Interest income on funds on deposit in the Senior Lien Bond Reserve Fund, Subordinate Lien Bond Reserve Fund and Inferior Lien Bond Reserve Fund may be transferred to the related Interest and Sinking Fund, or such other funds as may be permitted by federal tax law.

(3) There are no Inferior Lien Bonds Outstanding. See "INTRODUCTION – Senior Lien Obligations and Inferior Lien Bonds."

(4) PFC Revenues are not pledged to pay debt service on any Outstanding Airport Obligations, including the Series 2020 Bonds, but may be pledged or otherwise obligated, consistent with FAA regulations. Periodically, the Houston Airport System irrevocably commits PFC Revenues to the Subordinate Lien Bond Interest and Sinking Fund for the purpose of paying eligible debt service attributable to approved PFC projects. See "HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION –Sources of Revenues –PFC Revenues."



## Debt Service Reserves

The Master Ordinance establishes a Subordinate Lien Bond Reserve Fund for all Subordinate Lien Bonds and requires to be maintained therein a balance equal to the Reserve Fund Requirement.

Reserve Fund Requirement for Reserve Fund Participants. Within the Subordinate Lien Bond Reserve Fund, there is a Subordinate Lien Bond Reserve Fund Participant Account (i.e., the common reserve account), which constitutes trust funds held in trust for Owners of the Subordinate Lien Bonds that are secured thereby (the “Reserve Fund Participants”). All Subordinate Lien Bonds Outstanding as of the date hereof have been declared and designated to be Reserve Fund Participants; the Series 2020 Bonds will be declared and designated to be Reserve Fund Participants in the Officers Pricing Certificate. With respect to those Subordinate Lien Bonds that are Reserve Fund Participants (i.e., all Outstanding Subordinate Lien Bonds), the Reserve Fund Requirement is equivalent to the maximum annual Debt Service Requirements on such bonds, which amount shall be computed and recomputed upon the issuance of each series of Subordinate Lien Bonds that are Reserve Fund Participants and on each date on which such bonds are paid at maturity or optionally or mandatorily redeemed.

Reserve Fund Non-Participants. The Master Ordinance also provides that any issue of Subordinate Lien Bonds may be secured by a lien on an account of the Subordinate Lien Bond Reserve Fund that is created and held for the sole benefit of such series of Subordinate Lien Bonds, referred to in the Master Ordinance as “Reserve Fund Non-Participants.” No Outstanding Subordinate Lien Bonds are Reserve Fund Non-Participants; therefore, no such account has been created within the Subordinate Lien Bond Reserve Fund. All of the Outstanding Subordinate Lien Bonds are secured by, and the Series 2020 Bonds will be secured by, a lien on the Subordinate Lien Bond Reserve Fund Participant Account.

Draws on the Subordinate Lien Bond Reserve Fund Participant Account. The Subordinate Lien Bond Reserve Fund Participant Account is required to be used to pay the principal of and interest on the Subordinate Lien Bonds that are Reserve Fund Participants at any time when there is not sufficient money available in the Subordinate Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Subordinate Lien Bond Reserve Fund Surety Policies allocable to the Subordinate Lien Bond Reserve Fund Participant Account) and to repay amounts drawn under any Subordinate Lien Bond Reserve Fund Surety Policy allocable to the Subordinate Lien Bond Reserve Fund Participant Account for such purpose, together with interest thereon, in accordance with the terms of the City’s reimbursement obligations incurred in connection with such Subordinate Lien Bond Reserve Fund Surety Policies. The Subordinate Lien Bond Reserve Fund Participant Account may also be used to make the final payments for the retirement or defeasance of all Subordinate Lien Bonds then Outstanding that are Reserve Fund Participants.

Funding the Reserve Fund Requirement. As further provided in the Master Ordinance, each increase in the Reserve Fund Requirement resulting from the issuance of Additional Subordinate Lien Bonds is required to be funded at the time of issuance and delivery of such series of bonds. The Reserve Fund Requirement may be satisfied by depositing to the credit of the appropriate account of the Subordinate Lien Bond Reserve Fund either (1) proceeds of such Additional Subordinate Lien Bonds or other lawfully appropriated funds or (2) a Subordinate Lien Bond Reserve Fund Surety Policy.

Deficiencies in the Subordinate Lien Bond Reserve Fund. As further provided in the Master Ordinance, in any month in which any account of the Subordinate Lien Bond Reserve Fund contains less than the applicable Reserve Fund Requirement, the City shall transfer from the Revenue Fund, after making all required payments of Operation and Maintenance Expenses and after making all required transfers to the (i) Senior Lien Bond Interest and Sinking Fund, (ii) the Senior Lien Bond Reserve Fund and (iii) the Subordinate Lien Bond Interest and Sinking Fund, on a pro rata basis into the Subordinate Lien Bond Reserve Fund Participant Account and other designated non-participant accounts, if any, such amounts as shall be required to permit the City to pay all reimbursement obligations under the Subordinate Lien Bond Reserve Fund Surety Policies allocable to the Subordinate Lien Bond Reserve Fund Participant Account or such other designated non-participant accounts, as applicable, within a twelve-month period, and such additional amounts as shall be sufficient to enable the City within a twelve-month period to reestablish the Reserve Fund Requirement in the Subordinate Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable.

See APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE for excerpts of the Master Ordinance relating to the Subordinate Lien Bond Reserve Fund. For a discussion regarding the City’s current surety policies for the Outstanding Subordinate Lien Bonds and the Senior Lien Notes, see “RESERVE FUNDS AND RESERVE FUND SURETY POLICIES.”

## Additional Reserves and Other Funds

The Master Ordinance also provides for maintenance of an Operation and Maintenance Reserve Fund and a Renewal and Replacement Fund. The Operation and Maintenance Reserve Fund is required to be funded in an amount at least equal

to two months' current Operation and Maintenance Expenses (which amount shall annually be re-determined by the Director of Aviation for the Houston Airport System at the time the department submits the proposed annual Houston Airport System budget based upon either such official's recommended budget for Operation and Maintenance Expenses or an estimate of actual Operation and Maintenance Expenses for the then-current Fiscal Year). The amount required by the Master Ordinance to be maintained in the Renewal and Replacement Fund is \$10 million (or any greater amount required by any supplemental ordinance authorizing any series of additional Airport Obligations). Unappropriated funds in the Operations and Maintenance Reserve Fund and the Renewal and Replacement Fund may be used to pay operations and maintenance expenses, if needed, among other purposes. See APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE and “DEBT SERVICE REQUIREMENTS OF HOUSTON AIRPORT SYSTEM OBLIGATIONS – Schedule 8A: Cash and Liquidity.”

## **RESERVE FUNDS AND RESERVE FUND SURETY POLICIES**

### **Reserve Fund for the Subordinate Lien Bonds**

#### ***Reserve Fund Requirement***

The Reserve Fund Requirement for the Subordinate Lien Bonds that are Reserve Fund Participants, which includes all of the Outstanding Subordinate Lien Bonds, was approximately \$187 million as of June 30, 2020. The Series 2020 Bonds will be issued as Reserve Fund Participants. Upon the issuance of the Series 2020 Bonds, the Reserve Fund Requirement for the Subordinate Lien Bonds that are Reserve Fund Participants will be \$191,724,368.

As of June 30, 2020, the Subordinate Lien Bond Reserve Fund Participant Account was funded with cash and allowable investments totaling \$68,960,003.37 and certain Subordinate Lien Bond Reserve Fund Surety Policies, as described in the table below, totaling \$134,871,248.50. All amounts credited to the Subordinate Lien Bond Reserve Fund Participant Account are pledged and available to pay debt service on all Subordinate Lien Bonds that are Reserve Fund Participants (i.e., all the Outstanding Subordinate Lien Bonds).

The City has never utilized any amounts or drawn upon any surety policies in the Subordinate Lien Bond Reserve Fund to pay Debt Service Requirements. Based on a variety of factors, the City may supplement the current funding of the Subordinate Lien Bond Reserve Fund with available funds of the Houston Airport System, including bond proceeds, derived from future issuances or a Subordinate Lien Reserve Fund Surety Policy (as defined in APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE).

See “SECURITY FOR THE SERIES 2020 BONDS – Debt Service Reserves” herein.

#### ***Subordinate Lien Bond Reserve Fund Surety Policies***

As shown in the table below, the Reserve Fund Requirement for Subordinate Lien Bonds that are Reserve Fund Participants (i.e., all of the Outstanding Subordinate Lien Bonds) is partially funded with Subordinate Lien Bond Reserve Fund Surety Policies insured by National Public Finance Guarantee Corporation (“National”) and Assured Guaranty Municipal Corp., formerly known as Financial Security Assurance, Inc. (“AGM”).

In addition to the cash and investments on deposit in the Subordinate Lien Bond Reserve Fund Participant Account described above, the following table describes the surety policies on deposit in such account as of June 30, 2020.

<b><u>Reserve Fund Policy Issuer</u></b>	<b><u>Termination Date</u></b>	<b><u>Maximum Amount</u></b>
National <sup>(1)</sup>	July 1, 2022	\$ 24,477,885.00
National <sup>(1)</sup>	July 1, 2028	32,050,000.00
National <sup>(1)</sup>	July 1, 2030	43,269,100.00
National <sup>(1)</sup>	July 1, 2032	3,152,880.00
AGM	Earlier of July 1, 2032, or the date that no Series 2002A and 2002B Bonds are Outstanding	31,921,383.50
<b>TOTAL:</b>		<b>\$134,871,248.50</b>

(1) On August 19, 2013, pursuant to a novation agreement, National became the primary insurer of the policies originally issued by Financial Guaranty Insurance Corporation.

## **Reserve Fund for the Senior Lien Obligations**

The City maintains a separate reserve account within the Senior Lien Bond Reserve Fund for the Senior Lien Notes. As of April 1, 2020, pursuant to the supplemental ordinance authorizing the Senior Lien Notes, the City agreed not to issue Senior Lien Notes in an amount that would cause the Senior Lien Note Reserve Requirement to exceed the amount on deposit in the Senior Lien Note Reserve Fund Participant Account. The Senior Lien Bond Reserve Fund account for the Senior Lien Notes is funded with three surety policies insured by National in an aggregate maximum amount of approximately \$12,374,996. Two of such surety policies in an aggregate maximum amount of \$6,374,996 terminate on October 25, 2023, and the third surety policy in the maximum amount of \$6,000,000 terminates on July 1, 2030.

There are currently no Senior Lien Bonds Outstanding and, consequently, no debt service reserves relating to Senior Lien Bonds.

## **COVENANTS AND TERMS OF THE ORDINANCE**

The following section describes certain covenants and other terms of the Ordinance. Capitalized terms used in this section but not otherwise defined have the meanings given to such terms in APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE. Certain proposed amendments to the Master Ordinance were adopted as part of the Supplemental Ordinance and shall be binding upon all Owners of the Series 2020 Bonds, upon the effective date of such proposed amendments. See APPENDIX B-2 – PROPOSED AMENDMENTS TO THE MASTER ORDINANCE for a description of the proposed amendments and “– Proposed Amendments to the Master Ordinance” below for a discussion of when and how such amendments will become effective.

### **Rate Covenant**

The City has covenanted in the Master Ordinance that it will at all times fix, charge, impose and collect rentals, rates, fees and other charges for use of the Houston Airport System, and, to the extent it legally may do so, revise the same as may be necessary or appropriate, in order that in each Fiscal Year the Net Revenues will at all times be at least sufficient to equal the larger of either: (1) all amounts required to be deposited in such Fiscal Year to the credit of the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund and the Inferior Lien Bond Reserve Fund or (2) an amount not less than 125% of the Debt Service Requirements for the Outstanding Senior Lien Obligations for such Fiscal Year, plus 110% of the Debt Service Requirements for the Outstanding Subordinate Lien Bonds for such Fiscal Year, plus 100% of the Debt Service Requirements for the Outstanding Inferior Lien Bonds for such Fiscal Year. (Such covenant is referred to herein as the “Rate Covenant.”)

As further set forth in APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE, the calculation of Debt Service Requirements excludes any portion or all of the interest on or principal of Airport Obligations which has been irrevocably committed by the City to be paid from Houston Airport System funds other than Net Revenues including, but not limited to, PFC Revenues. Additionally, the calculation of Debt Service Requirements does not include any capitalized interest on Airport Obligations.

If the Net Revenues in any Fiscal Year are less than the amounts specified above, the City, promptly upon receipt of the annual audit for such Fiscal Year, must request an Airport Management Consultant to make its recommendations, if any, as to a revision of the City’s rentals, rates, fees and other charges, its Operation and Maintenance Expenses or the method of operation of the Houston Airport System in order to satisfy as quickly as practicable the foregoing requirements. Copies of such request and the recommendations of the Airport Management Consultant, if any, shall be filed with the City Secretary. So long as the City substantially complies in a timely fashion with the recommendations of the Airport Management Consultant, the City will not be deemed to have defaulted in the performance of its duties under the Master Ordinance even if the resulting Net Revenues are not sufficient to be in compliance with the Rate Covenant, so long as there is no other default under the Master Ordinance.

For further description of the Rate Covenant and related definitions, see APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.

### ***Other Factors Affecting Rate Covenant***

The City’s ability to comply with the Rate Covenant may be limited in that, among other things, (1) a significant portion of the Gross Revenues of the Houston Airport System is derived pursuant to contracts that cannot be adjusted unilaterally by the City, (2) the most important contracts, Use and Lease Agreements with the airlines, provide for recovery of certain, but not all, operating and capital costs attributable to certain facilities and do not include a debt service coverage

factor, (3) parking and other sources of Gross Revenues, which are not derived under contracts, are subject to competitive supply and demand constraints, and (4) certain City Charter tax and revenue limitations, voter-approved propositions and ongoing litigation involving such limitations and propositions could have an impact on the operations of the Houston Airport System. See “THE CITY AND CITY FINANCIAL INFORMATION – City Charter Tax and Revenue Propositions.” See also “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

### **Additional Airport Obligations**

The Master Ordinance permits the City to issue, for any lawful Houston Airport System purpose, Additional Subordinate Lien Bonds, Additional Senior Lien Obligations and Inferior Lien Bonds, if certain conditions are satisfied. For detailed information relating to the issuance of additional Airport Obligations, see APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.

### **Amendments to Ordinance**

As further set forth in APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE, the Ordinance provides that it may be amended either with or without the consent of Owners under certain circumstances.

#### *Amendments of Ordinance without Consent*

The City may, without the consent of or notice to the Owners of the Airport Obligations, amend the Ordinance for any one or more of the following purposes: (1) to cure any ambiguity, defect, omission or inconsistent provision in the Ordinance or in the Airport Obligations; or to comply with any applicable provision of state or federal law or regulation of federal agencies; provided, however, that such action shall not adversely affect the interests of the Owners of the Airport Obligations; (2) to change the terms or provisions of the Ordinance to the extent necessary to prevent the interest on the Airport Obligations from being includable within the gross income of the Owners thereof for federal income tax purposes; (3) to grant to or confer upon the Owners of the Airport Obligations any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Owners of the Airport Obligations; (4) to add to the covenants and agreements of the City contained in the Ordinance other covenants and agreements of, or conditions or restrictions upon, the City or to surrender or eliminate any right or power reserved to or conferred upon the City in the Ordinance; (5) to subject to the lien and pledge of the Ordinance additional Net Revenues that may include revenues, properties or other collateral, (6) to add requirements or incorporate modifications the compliance with which is required by a rating agency in connection with issuing or confirming a rating with respect to any series of Airport Obligations; (7) to authorize any series of Additional Senior Lien Bonds, Additional Senior Lien Notes, Additional Subordinate Lien Bonds or additional Inferior Lien Bonds, and, in connection therewith: (i) to specify and determine the terms, forms and details thereof and (ii) to create such additional funds and accounts and to effect such amendments of the Ordinance that may be necessary for such issuance, provided in each case that no such amendment or supplement shall be contrary to or inconsistent with the limitations set forth in the Ordinance; (8) to evidence any sale, transfer or encumbrance of the Houston Airport System in accordance with the Ordinance; (9) to make any other modification, amendment or supplement that shall not materially adversely affect the interests of the Owners of the Airport Obligations; (10) to cure or correct any technical defect in connection with the terms, conditions or procedures relating to the variable rate provisions contained in any Supplemental Ordinance; provided, however, that such action shall not adversely affect the interests of the owners of the Airport Obligations; and (11) prior to the conversion of any variable rate Airport Obligations to a different interest rate mode, to change the terms, conditions or procedures relating to the new interest rate mode.

#### *Amendments of Ordinance with Consent*

The City may at any time adopt one or more ordinances amending, modifying, adding to or eliminating any provisions of the Ordinance, but, if such amendment is not of the character described in the preceding paragraph, only with the consent given in accordance with the Ordinance of the Owner or Owners of not less than a majority in aggregate unpaid principal amount of the Airport Obligations then Outstanding and affected by such amendment, modification, addition or elimination; provided, however, no such amendment, modification, addition or elimination shall permit (1) an extension of the maturity of the principal of or interest on any Airport Obligations issued under the Ordinance, (2) a reduction in the principal amount of any Airport Obligations or the rate of interest on any Airport Obligation, (3) a privilege or priority of (a) any Senior Lien Obligation(s) over any other Senior Lien Obligation(s), (b) any Subordinate Lien Bond(s) over any other Subordinate Lien Bond(s), or (c) any Inferior Lien Bond(s) over any other Inferior Lien Bond(s), or (4) a reduction in the aggregate principal amount of the Airport Obligations required for consent to such amendment, unless the Owner or Owners of 100% in aggregate principal amount of the Airport Obligations shall consent to any of such changes.

## **Proposed Amendments to the Master Ordinance**

The City has determined to amend the Master Ordinance in the form set forth in APPENDIX B-2 – PROPOSED AMENDMENTS TO THE MASTER ORDINANCE (such amendments are collectively referred to as the “Proposed 2016 Amendments”). The following summarizes the changes made to the Master Ordinance by the Proposed 2016 Amendments.

The Proposed 2016 Amendments were adopted as part of the Supplemental Ordinance and shall be binding upon all Owners of the Series 2020 Bonds. The City intends to include the Proposed 2016 Amendments in each future supplemental ordinance until the Proposed 2016 Amendments become effective and therefore are incorporated into the Master Ordinance, subject to satisfaction of the required conditions.

The Proposed 2016 Amendments (or any portion thereof) shall not become effective until the date on which the Proposed 2016 Amendments (or portions thereof) have become incorporated or deemed incorporated into every ordinance pursuant to which Airport Obligations are then Outstanding (the “Amendment Effective Date”), subject to satisfaction of any required conditions. Although the Proposed 2016 Amendments have been incorporated into the Supplemental Ordinance authorizing the Series 2020 Bonds and certain other Airport Obligations, the amendments are not yet effective and the City may not exercise its rights under any portion of the Proposed 2016 Amendments until the Amendment Effective Date. The Master Ordinance will not be deemed to be amended by the Proposed 2016 Amendments until the Amendment Effective Date.

### ***Short-Term/Demand Obligations***

The Master Ordinance provides that the aggregate principal amount of Short Term/Demand Obligations Outstanding at any time may not exceed the greater of \$150,000,000 or 30% of the aggregate principal amount of Senior Lien Obligations and Subordinate Lien Bonds Outstanding at the time of issuance of the last series of Short Term/Demand Obligations. The City has determined to amend the Master Ordinance to delete this limitation on the total aggregate principal amount of Short-Term/Demand Obligations that may be Outstanding at any time. Additionally, the City has determined to amend the definition of “Short-Term/Demand Obligations” to delete the requirement that an obligation must be secured by a credit or liquidity facility to qualify as a Short-Term/Demand Obligation.

### ***Released Revenues***

The City has determined to amend the Master Ordinance to allow the City to remove a specific, identifiable portion of the income and revenues from the definition of “Gross Revenues” once certain conditions are met, including meeting a debt service coverage test, the delivery of an opinion of bond counsel and ratings confirmations from each rating agency rating the Airport Obligations affected thereby. See APPENDIX B-2 – PROPOSED AMENDMENTS TO THE MASTER ORDINANCE for a full description of such conditions.

### ***Reserve Fund Requirement for Reserve Fund Non-Participants***

The Master Ordinance requires all Reserve Fund Non-Participants to maintain a Reserve Fund Requirement equal to maximum annual Debt Service Requirements for all Airport Obligations that are secured thereby. The City has determined to amend the definition of Reserve Fund Requirement for Reserve Fund Non-Participants to be any amount set forth in the supplemental ordinance that authorizes the issuance of such Reserve Fund Non-Participants. There is no effect on the Reserve Fund Requirement for Reserve Fund Participants, including the Series 2020 Bonds.

### ***Qualified Hedge Agreements***

The City has determined to amend the Master Ordinance to allow a financial institution that has long-term credit ratings in one of the two highest rating categories by a single nationally recognized rating service to qualify as a qualified hedge counterparty. The Master Ordinance currently requires such an institution to have such long-term credit ratings from two nationally recognized rating services.

### ***Prior Proposed Amendment relating to Ellington Airport***

In ordinances adopted by the City in 2011 and 2012, the City proposed an amendment to the definition of “Airport System” that excluded Ellington Airport. The City has since determined that such proposed amendment is not effective, and such proposed amendment will expire with the refunding of the 2020C Refunded Bonds.

## THE HOUSTON AIRPORT SYSTEM

### The Houston Airport System

The Houston Airport System is an enterprise fund of the City. The Houston Airport System is comprised of three airports – Intercontinental, Hobby and Ellington. Intercontinental is the nation’s 14th busiest airport (as measured by enplaned passengers in calendar year 2018) and is classified as a “large hub airport” by the Federal Aviation Administration (“FAA”). It serves as an international gateway airport and a primary connecting point in the national air transportation system and was the second busiest hub for United in calendar year 2018. Additionally, Intercontinental is the primary air cargo airport for the region. Hobby is the nation’s 35th busiest airport (as measured by enplaned passengers in calendar year 2018) and is classified as a “medium hub airport” by the FAA. Hobby is a primary station for Southwest, which offers domestic service and international service to destinations in Mexico, Central America and the Caribbean. Ellington is currently used for general aviation, military, Coast Guard and NASA operations, but has no commercial passenger service. The Houston Airport System obtained a spaceport license for Ellington in June 2015 from the FAA, allowing Ellington to accommodate horizontal-launch commercial spaceflight operations. See “– Houston Airport System Facilities – *Ellington Airport.*”

See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” and “INVESTMENT CONSIDERATIONS” herein.

### Houston Airport System Facilities

#### *George Bush Intercontinental Airport/Houston*

Intercontinental is situated on 10,080 acres of land approximately 22 miles north of downtown Houston. Opened in 1969, it is the Houston area’s busiest commercial airport. Intercontinental’s passenger terminal facilities currently consist of five terminal buildings and related concourses – Terminals A, B, C, D and E – with a total of 128 aircraft gates and seven hardstand positions. The facilities provide public parking for approximately 24,000 automobiles in multi-story garages and surface lots, an automated underground inter-terminal train system (the “Subway”) that connects (pre-security) the existing five terminals and the Marriott Hotel, and an above-ground level automated people mover system (the “Skyway”) that connects (post-security) all five terminals and a central federal customs and immigration inspection services building (the “Central FIS Facility”) accommodating international arrivals from Terminals D and E.

Terminal A contains 20 aircraft gates including seven hardstand positions and is used by various airlines (including United Express affiliates) for domestic and precleared international aircraft operations. Foreign-flag airlines operate international operations out of Terminal D, which contains 12 aircraft gates. Additionally, Terminal D is used by United Express affiliates and Spirit Airlines for some international arrivals. Terminals B, C and E are used exclusively by United and its United Express affiliates. Terminal B, containing 42 aircraft gates, is used by United Express for regional jet operations. United redeveloped Terminal B in two phases, which include certain improvements to Terminal C; additional phases may or may not be constructed in the future. Phase 1 of the redevelopment opened in May 2013 and consisted of the construction of a new South Concourse building containing 30 ground-level loading positions for regional jet operations. Phase 2 of the redevelopment opened March 2017 and consisted of a new North Concourse, known as and referred to herein as “Terminal C North,” containing 11 aircraft gates. Additional phases of redevelopment of Terminal B may or may not be constructed by United, as determined in its sole discretion, provided that the Houston Airport System must consent to the construction of any additional phase. The City expects that additional improvements to be constructed by United would be financed by special facilities bonds secured solely from rental payments and other payments from United. Terminal C contains 31 aircraft gates and primarily accommodates United and United Express domestic operations. Terminal E, containing 23 gates, is used by United for mainline international arrivals and departures and some domestic arrivals and departures and by United Express for some international arrivals. The Central FIS Facility is located between Terminal D and Terminal E and has the capacity to process approximately 4,500 arriving international passengers per hour.

Intercontinental has five runways interconnected by a system of taxiways. The longest runway is 12,000 feet long; two are approximately 10,000 feet long; and the remaining two are at least 9,000 feet long. The runways are equipped with instrument landing systems, lighting systems, and other navigation aids and are configured to permit the simultaneous use of the three east-west runways for aircraft landings in most weather conditions.

Also located on Intercontinental property are multiple air cargo buildings providing nearly one million square feet of space and a fuel farm that currently provides approximately 13 million gallons of storage capacity for jet fuel. Two fixed base operators provide airline, corporate and general aviation aircraft operations support. The Marriott Hotel is located between Terminals B and C, has 573 rooms and underwent a substantial renovation completed in January 2016. United operates facilities for aircraft maintenance, catering, flight attendant training, and other support functions, and is constructing a new 270,000-square-foot technical operations center to accommodate a hangar for widebody aircraft maintenance and is

improving and expanding other aircraft maintenance and support facilities. The office areas of the technical operations center opened in early calendar year 2020, and the hangar facility and supporting shops are expected to be completed in late calendar year 2020. The hangar and supporting shops are expected to be in use in the first quarter of calendar year 2021. ExpressJet operates a flight training center.

A consolidated rental car facility opened in August 2003 and was financed by the proceeds of certain bonds issued in 2001 that are secured by and payable from a customer facility charge assessed on rental car customers at Intercontinental and are not secured by a lien on Net Revenues.

See “CAPITAL IMPROVEMENT PROGRAM” below for a discussion of planned renovations and improvements to Intercontinental. See “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements” below for descriptions of the lease agreements and special facilities leases relating to the facilities at Intercontinental.

### ***Hobby Airport***

Hobby is located on 1,500 acres of land approximately 11 miles southeast of downtown Houston. It has a terminal building with two concourses. The Central Concourse, completed in 2008, contains 25 gates and is used primarily for domestic arrivals and departures. The West Concourse opened in October 2015 and contains five gates, all connected to the federal immigration and customs inspection services building, which can accommodate up to approximately 800 arriving passengers per hour. Southwest’s ticketing facilities are located in the West Terminal, while ticketing facilities for other airlines are located in the Central Terminal. All domestic baggage claim facilities are located in the Central Terminal. The entire terminal complex includes over 910,000 square feet of space. Hobby has four runways in total: two runways are approximately 7,600 feet long, one runway is 6,000 feet long and one runway is approximately 5,150 feet long. The runways are equipped with instrument landing systems, lighting systems, and other navigation aids to permit use in most weather conditions.

Additional facilities at Hobby include approximately 6,500 public parking spaces, rental car facilities, an underground fuel distribution system, a cargo building, several aircraft maintenance facilities and some corporate hangars. Five fixed-base operators support Hobby’s significant corporate and general aviation operations. Southwest maintains a maintenance facility and hangar at Hobby and opened a new 240,000 square foot hangar at Hobby in January 2020.

See “CAPITAL IMPROVEMENT PROGRAM” below for a discussion of planned improvements to Hobby. See “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements” below for descriptions of the lease agreements relating to the facilities at Hobby.

### ***Ellington Airport***

Ellington is located approximately 15 miles southeast of downtown Houston on approximately 1,900 acres. The joint use agreement with the federal government under which it operates expired in September 2007, and there currently are no intentions to renew the agreement. It has no scheduled commercial flights and its non-governmental operations are for general aviation. The Texas Air National Guard, NASA and the Coast Guard currently use Ellington. Ellington has three runways: one is 9,000 feet long, another is approximately 8,000 feet long and the third is approximately 4,600 feet long.

Ellington has one fixed-based operator leasing two fixed-base operating facilities, approximately 90 T-hangars, and three corporate-base operators that allow it to relieve Hobby of general aviation traffic. Lone Star Flight Museum opened a new facility at Ellington in September 2017 to replace its prior facility in Galveston.

The Houston Airport System was granted a Launch Site License from the FAA in June 2015 that enables Ellington to establish itself as a launch site for Reusable Launch Vehicles (“RLV”), making it the 10th commercial spaceport in the United States. RLVs launch horizontally, not vertically, similar to commercial aircraft. The Houston Airport System is proceeding with plans to establish the required infrastructure and facilities to support spaceport operations. In October 2015, the Houston Airport System acquired a 53,000-square-foot aerospace engineering building and land adjacent to Ellington to establish a business incubator facility for commercial spaceflight and other high-technology companies. No spaceflight operations are currently scheduled. See “CAPITAL IMPROVEMENT PROGRAM” below for a discussion of planned improvements to Ellington.

## **Management**

The management of the Houston Airport System is the responsibility of the Director of Aviation, who is appointed by the Mayor and confirmed by the City Council. The Director of Aviation has a staff of approximately 1,200 employees.

The Houston Airport System is an enterprise fund of the City, under the administrative control of the Mayor. The City Controller, as the Chief Financial Officer of the City, maintains the books of account, prepares financial statements and, with the Mayor, co-signs all warrants, contracts and orders for payment of any public funds or money relating to the Houston Airport System.

Following is selected biographical information for certain principal administrative officers and airport staff of the Houston Airport System:

**Mario C. Diaz** was appointed Director of the City of Houston Department of Aviation in May 2010. He is responsible for the overall management of the Houston Airport System's three aviation facilities. Prior to his appointment as Director of Aviation, beginning in 1999, Mr. Diaz served as the deputy general manager for Hartsfield-Jackson Atlanta International Airport where he was responsible for the daily operational activities of the world's busiest airport, including operations, business, finance and capital development. He has been one of the industry's leading authorities in aviation technology as well as the study of future developments in commercial aviation. Prior to 1999, Diaz was the manager of business, properties and commercial development for New Jersey Airports for four years. In this role, he managed the division responsible for all business and lease negotiations at Newark International Airport as well as the day-to-day oversight management of Teterboro Airport, one of the nation's premier general aviation airports and a major reliever airport for Newark International. Before that, Mr. Diaz served for 17 years with the Port Authority of New York and New Jersey. Beginning in 1981, Mr. Diaz held key management positions in leasing, finance, marketing, operations and properties. During this period, Diaz also served 18 months as the assistant director of the redevelopment program at John F. Kennedy Airport. A native of Barranquitas, Puerto Rico, and a licensed private pilot with instrument certification, Diaz earned his Bachelor of Arts degree from Rutgers University in Newark, New Jersey. He also earned a Master of Business Administration in finance from Rutgers Graduate School of Business Administration in New Jersey.

**Steven Hennigan, C.M., ACE**, is the Chief of Operations for the Houston Airport System. He is responsible for Operations at Intercontinental and Hobby, which includes the Airport Operations Centers, Airside, Safety Management System (SMS), Landside, Ground Transportation, Security/Badging and Safety & Emergency Management business units. Previously, Mr. Hennigan had served as the Assistant General Manager for Operations at Intercontinental since April 2013. Prior to coming to the Houston Airport System, Mr. Hennigan worked at the Denver International Airport in various roles. Mr. Hennigan received a Bachelor of Science degree in Aviation Business Administration from Embry-Riddle Aeronautical University. He's an active American Association of Airport Executives (AAAE) member and holds the Certified Member (C.M.) designation in addition to the Airport Certified Employee (ACE) designation for Operations and Security. He also has a Commercial Pilot: Airplane Single and Multiple Engine Land Certificate. Additionally, Mr. Hennigan has extensive emergency management training, including the Crisis Intervention Team (CIT) Certificate and Incident Command certification through the Center for Domestic Preparedness.

**Robert Barker**, Chief Development Officer of the Infrastructure Division, is responsible for overseeing the administration of design and construction contracts, managing long-term and short-term airport projects, analyzing operations and implementing best practice policies and procedures for the Houston Airport System. Mr. Barker is a retired U.S. Navy engineering officer and certified facility manager with over 20 years of international airport development, infrastructure and asset management experience. Since joining the Houston Airport System in 2012, Mr. Barker also has served as Deputy Director for Capital Programs, Executive Representative for the Intercontinental Terminal Redevelopment Program, and Assistant Director for Asset Management. Prior to joining the Houston Airport System, Mr. Barker's previous work assignments included asset management leadership positions at Dallas-Fort Worth International Airport and the Cincinnati/Northern Kentucky International Airport as well as a variety of consulting engagements at Los Angeles International Airport, Indianapolis International Airport, Hartsfield-Jackson Atlanta International Airport, Northwest Florida Regional Airport and Phoenix Sky Harbor International Airport.

**J'Maine Chubb**, Chief Financial Officer, is responsible for monitoring the overall financial health of the Houston Airport System. Mr. Chubb provides financial leadership by working with the Executive Management Team to establish long-range financial goals, strategies and plans while also ensuring that short-term funding needs are met. Mr. Chubb plays a leading role in driving the Houston Airport System's "Build the Platforms for Future Success" strategic priority, as he helps the Houston Airport System maintain fiscal discipline, fund capital improvements and pursue revenue growth opportunities. He brings over 20 years of finance and accounting experience in the private and not-for-profit sectors. As Assistant Director of Accounting for the Houston Airport System, Mr. Chubb provided direction and leadership for General Accounting, Financial Reporting, Accounts Receivable, Accounts Payable and Fixed Assets and Government Grant Administration groups. He led and engaged an accounting and finance organization of 30 employees while utilizing his expertise to resolve audit issues. Previously, Mr. Chubb held senior accounting positions at CITGO Petroleum Corporation, Halliburton and Schlumberger. Prior to his experience in the oil and gas sector, Mr. Chubb held accounting positions at Toyota, the State of Georgia and the State of Michigan. Mr. Chubb holds a Master of Business Administration degree and a Bachelor of Science



in Accounting degree from Wayne State University. He holds Certified Global Management Accountant (CGMA), Certified Management Accountant (CMA) and Certified in Strategy and Competitive Advantage (CSCA) and is also a licensed Certified Public Accountant (CPA) in the State of Texas.

**Kenneth Gregg** is the Assistant Director of Financial Planning and Analysis for the Houston Airport System. Mr. Gregg oversees the annual development of airline rates and charges and the reconciliation of prior year's rates and charges, conducts financial planning, performs airline statistical analysis and forecasting as well as ad hoc financial analysis. He also manages the debt and treasury programs for the Houston Airport System. Prior to joining the Houston Airport System in March 2011, Mr. Gregg served in various operational, financial and corporate real estate roles with Continental Airlines, Inc. ("Continental") (now United) for over 22 years. Mr. Gregg received a Bachelor of Science degree in Finance from the University of Houston – Clear Lake and a Master of Science degree in Finance from the Mays Business School at Texas A&M University.

**Liliana Rambo, CAPP** is the Chief Terminal Management Officer for Intercontinental and Hobby, which together provided travel services to over 56 million passengers in Fiscal Year 2019. The purpose of the Terminal Management Division is to plan and implement strategic policy and provide day-to-day guidance and direction to assure that passengers traveling through the terminals at both commercial airports experience a five-star quality of service each and every time they travel. Every touchpoint the passenger has within the terminal: the ticketing counters, security checkpoint, hold rooms, concessions, FIS, baggage claim, and restrooms must all be thought through, planned and executed correctly, consistently, and with a sense of service. Ms. Rambo is responsible for over 250 service delivery team members. The Terminal Management Division is the central coordinating body tasked with the responsibility to work with each Division in the Houston Airport System providing direct contribution, service or action to achieve the Houston Airport System vision to become a five-star global air service gateway where the magic of flight is celebrated. Ms. Rambo holds a Master of Science degree in Management from St. Thomas University and a Bachelor of Business Administration degree in Marketing and International Business from Florida International University. She has held key leadership roles within the parking community, most recently as the Chair of the Board of Directors for the International Parking Institute. Ms. Rambo currently serves on the Board of Directors for the Hobby Management District; Texas Commercial Airports Association and is a candidate for the ACI-ICAO Airport Management Professional Accreditation Programme.

**Arturo Machuca**, General Manager of Ellington, is responsible for the daily operations and the development and implementation of policies and procedures at Ellington. He also is the lead on the Houston Spaceport project. Mr. Machuca joined the Houston Airport System in 2009 with over 30 years of sales and marketing experience in the aviation industry. His prior responsibilities included economic development, industry affairs and business relations for all three airports, and was tasked with the responsibility of developing a plan to bring a commercial spaceport to Ellington. He worked with various federal and local agencies, as well as key players in the aerospace industry, to create preliminary plans and conceptual drawings to pursue a license to bring commercial spaceflights to Ellington and is now leading commercial development efforts for Ellington Airport and Houston Spaceport. Mr. Machuca holds a Bachelor of Arts degree in Hotels and Tourism Administration from Universidad Regiomontana (Monterrey, Mexico).

**Ian N. Wadsworth** is Chief Commercial Officer of the Houston Airport System and Deputy Director of Commercial Development. He oversees the commercial activities at the Houston Airport System's three airports, including air service development, airline affairs, concessions, parking, real estate and business development. He joined the Houston Airport System in November 2008 as Deputy Director, Finance and Administration. In that position, Mr. Wadsworth was responsible for the finance, properties, human resources, and procurement functions. Prior to joining the Houston Airport System, Mr. Wadsworth served in various finance, planning and marketing roles over a span of 15 years at American Airlines, Capital One Financial, and Global Aero Logistics, the parent company of ATA Airlines, World Airways and North American Airlines. Mr. Wadsworth received a bachelor's degree in International Affairs from George Washington University and an MBA degree in Finance from the University of Michigan Business School.

**Tanya Acevedo** is the Chief Technology Officer for the Houston Airport System. In this capacity, Ms. Acevedo is responsible for ensuring the successful execution of the Houston Airport System's mission through innovative and enabling technology with a focus on technologies that deliver way-finding, passenger flow/tracking, and a stronger cyber security posture. Ms. Acevedo has three decades of experience and a proven track record of successfully implementing innovative solutions that increase efficiency and automate processes resulting in revenue generation and cost savings. Ms. Acevedo holds a Master of Business Administration degree from Central Michigan University and a Bachelor of Arts degree in Political Science from Michigan State University. She is a certified Project Management Professional.

**Saba Abashawl**, Chief External Affairs Officer, manages the External Affairs division for Global Industry Relations, Government Affairs and Corporate Communications. She leads a variety of Business Development initiatives that, together, provide a vital support network for new and expanded air service in Houston. This means a greater level of

connectivity for millions of Houstonians, fueling economic growth. Ms. Abashawl also serves as Executive Officer for the Mayor of Houston in foreign affairs and business development initiatives, fostering economic vitality for both the Houston Airport System and the greater Houston region. Her efforts not only seek to maximize the number of nonstop flights available to Houston, but also position and reinforce Houston as a “global gateway” destination to international leaders. Her efforts in working with leaders at the Department of Homeland Security and key communities has been instrumental in developing various passenger facilitation best practices and was integral in ensuring the timely opening of the new international concourse at Hobby in 2015, as well as implementing a touchless biometrics travel process at both Intercontinental and Hobby. Ms. Abashawl holds a bachelor’s degree in Marketing and a master’s degree in International Finance and Business, both from the University of St. Thomas and is an active member of numerous civic and professional organizations.

**Harleen Hines Smith** is the Chief Human Resource Officer for the Houston Airport System. She is responsible for developing a culture that enables employees to perform in accordance with the Houston Airport System’s strategic and tactical human capital management objectives. Ms. Hines Smith directs the teams responsible for the development and implementation of organizational development/talent management programs, enhancing job satisfaction, safety and wellness. In addition, her teams implement strategies that support business growth, improve morale and employee retention and strengthen relations between staff and management. In collaboration with the business executives, Ms. Hines Smith influences the Houston Airport System’s staffing needs, policies and guidelines. She is also responsible for managing the division’s budgets, designing accountability mechanisms and overseeing overall employment needs, employee records and documentation policies. Ms. Hines Smith has over 25 years of human resources management experience in the private and public sectors. She holds a Bachelor of Science degree in Business Administration and is an experienced executive focused on strategic management and goals.

**Jocelyn Labove** is the Houston Airport System’s Chief Aviation Risk and Regulatory Compliance Officer. Ms. Labove is responsible for: advancing the Houston Airport System’s initiatives and objectives through identification of threats; administrative policy development pertinent to aviation governing the use, control and operation of the Houston Airport System; developing and maintaining FAA compliant service level agreements with all stakeholders; interacting on behalf of the Director with third parties and officials pertinent to regulatory and compliance matters as directed. Ms. Labove brings almost three decades of labor and employment law experience, human resources experience as well as an executive management background in risk mitigation, compliance, management coaching, investigations, employee relations, legal research, project management and policy development. She is also Board Certified in Labor and Employment Law, SHRM certified and a Certified Mediator. Ms. Labove holds a law degree from the University of Houston Law Center and a Bachelor of Science degree in Biology and Chemistry from Houston Baptist University. Prior to joining the Houston Airport System, Ms. Labove worked at United Airlines as a Labor Relations Director in the Human Resources Department with oversight of litigation/arbitration dockets, staff and teams.

**Yvette Brown** is the Houston Airport System’s Chief Marketing Officer. Ms. Brown leads the development and execution for the Houston Airport System’s integrated marketing strategy, via digital, social and traditional marketing channels. She promotes the Houston Airport System’s brand and customer service proposition, leveraging future-facing technologies and research in support of the Houston Airport System being recognized as a leader in customer experience regionally, nationally and internationally. Ms. Brown had nearly 20 years of experience as a marketing and brand strategist prior to coming to the Houston Airport System, having worked on the client and agency side of consumer marketing. She has worked for brands such as AAA, USAA and Walmart, collaborating with cross-functional teams to promote products, services and brands. She also has a background in vendor management, contract negotiation and customer relationship management (CRM). Ms. Brown holds a Bachelor of Arts degree in Communications from Oakland University.

## **Airport Service Region**

The primary service region for the Houston Airport System is the nine-county Metropolitan Statistical Area of Houston-The Woodlands-Sugar Land (formerly called the Houston-Sugar Land-Baytown Metropolitan Statistical Area) (“MSA”) and the 12-county Combined Statistical Area (“CSA”) of Houston-Baytown-Huntsville. The 2019 U.S. Census population estimate for the MSA was approximately 7.1 million. The MSA and CSA contain the City, the nation’s fourth most populous city. Harris County (the county in which the City is primarily located) accounted for 66.7% of the MSA’s population. The extended air service region includes smaller markets with limited or no air service within driving distance of Houston Airport System airports, including Beaumont/Port Arthur, Bryan/College Station, Lufkin/Nacogdoches, and Victoria, Texas, and Lake Charles, Louisiana.

The MSA's population growth between 2015 and 2019 is described in the table below:

#### Historical Houston-The Woodlands - Sugar Land MSA Population Estimates

Year (July 1)	Population Estimate	Annual Percentage Change
2015	6,656,947	2.4%
2016	6,772,470	1.7
2017	6,892,427	1.8
2018	6,997,384	1.5
2019	7,066,141	0.9

Source: U.S. Census Bureau

The development and strength of the economic base of the Houston Airport System's service region is important to airline traffic growth at the airports. This dependency is particularly true for an economy with large trade volumes, such as that of the region, in which industries rely on airports for the connections provided by passenger and cargo airline service. Houston's location supports routes to destinations in Latin America. Intercontinental is currently the second busiest U.S. international gateway to Latin America, behind only Miami International airport. The region also is a center for the energy, financial, medical, transportation, retail and manufacturing industries. The region has 22 Fortune 500 companies headquartered in its metropolitan area, fourth behind the New York City, Chicago and Dallas regions. The 10 largest private employers in the Houston area in 2019 are shown in the table below:

#### Top 10 Greater Houston Private Employers

Company	Employment	Type of business
Walmart	37,000	Retail
Memorial Hermann Health System	24,108	Healthcare
HEB	23,732	Retail grocer
University of Texas MD Anderson Cancer Center	21,086	Healthcare
McDonald's Corporation	20,918	Retail fast food
Houston Methodist	20,000	Healthcare
Kroger Company	16,000	Retail grocer
United Airlines	14,941	Airline
Schlumberger	12,069	Oil and gas
Shell Oil Company	11,507	Oil and gas

Source: Greater Houston Partnership 2019 Houston Facts.

According to a study performed for the Houston Airport System by ICF International, Inc. dated September 20, 2019, Intercontinental supports more than 141,000 local jobs and contributes more than \$27.3 billion to the local economy. Hobby supports more than 36,000 local jobs and contributes more than \$5.8 billion to the local economy. Ellington supports more than 13,000 local jobs and contributes more than \$3.3 billion to the local economy.

#### IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM

On March 11, 2020, the World Health Organization declared COVID-19 a pandemic (the "Pandemic"). Since then, many state and local governments in the United States have issued "stay at home" or "shelter in place" orders that severely restrict movement and limit social, business and other activities to essential functions. In particular, the Governor of Texas (the "Governor") has issued several executive orders intended to slow the spread of COVID-19 in Texas by curtailing social, business and other activities, including many activities at the Houston Airport System. Additionally, a number of foreign nations have effectively closed their borders by restricting entry and exit except for essential travel and/or requiring inbound travelers to self-isolate for up to 14 days. These governmental actions have had, and continue to have, the effect of depressing demand for domestic and international passenger air travel. However, the Governor of Texas and other states' governors recently have begun to slowly reopen their states to allow limited social gatherings and certain businesses to reopen in stages.

The Pandemic and resulting restrictions have severely disrupted, and continue to disrupt, the economies of the United States and other countries, leading to volatility in the securities markets. Many of these markets have lost significant value and may continue to do so. Business failures, worker layoffs, and consumer and business bankruptcies have increased and are expected to continue to increase in the near future.

The Pandemic has adversely affected domestic and international travel and travel-related industries, but the Houston Airport System continues operating as essential infrastructure. Airports in the United States have been acutely impacted by reductions in passenger volumes and number of flights, as well as by the broader economic shutdown, resulting from the Pandemic. Airlines have reported unprecedented reductions in passenger volumes and expect these lower passenger volumes to continue for a period of time. In response, airlines have reduced flights in an attempt to match seat capacity to the modified demand for air travel. See “– Impact on Travel to and Revenues of Houston Airport System” below.

The United States government, the Federal Reserve Board, and foreign governments are taking statutory and regulatory actions and implementing other measures to mitigate the broad disruptive effects of the Pandemic on the U.S. and global economies. One of these actions, the Coronavirus Aid, Relief, and Economic Security Act (the “CARES Act”), enacted on March 27, 2020, addresses the crisis created by the Pandemic by providing, among other relief measures, direct aid for airports as well as direct aid, loans, and loan guarantees for passenger and cargo airlines. See “– Federal Support for Airports and Airlines (CARES Act)” below.

### **State and Local Governmental Response**

On or about March 11, 2020, the Mayor of the City and the County Judge of Harris County declared local disasters in order to contain the Pandemic and prevent its spread throughout the Houston region. On March 13, 2020, the Governor declared a state of disaster for all Texas counties in response to the Pandemic. Pursuant to Chapter 418, Texas Government Code, the Governor has broad authority to respond to disasters, including suspending any regulatory statute prescribing the procedures for conducting state business or any order or rule of a state agency that would in any way prevent, hinder, or delay necessary action in coping with the disaster, and issuing executive orders that have the force and effect of law. The Governor has since issued a number of executive orders relating to the Pandemic. These include, most recently, the issuance of Executive Order GA-29 on July 2, 2020 and Executive Order GA-30 on September 17, 2020 that, among other things, (i) continue restrictions on bars; (ii) increase maximum restaurant capacity from 50% to 75%; (iii) limit outdoor gatherings to 10 people unless approved by the mayor or county judge, as appropriate, subject to certain exceptions; and (iv) require face coverings over the nose and mouth in public or places open to the public when it is not feasible to maintain six feet of social distance, subject to certain exceptions. Executive Orders GA-29 and GA-30 will remain in effect and in full force unless modified, amended, rescinded or superseded by the Governor. These governmental actions limit social, business and other activities, thereby directly negatively impacting the Houston regional economy.

### **Forward-Looking Statements and Projections**

#### ***Forward-Looking Statements***

***The statements and information under this heading “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” contain “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. Such statements may involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance and achievements to be different from future results, performance and achievements expressed or implied by such forward- looking statements. Investors are cautioned that the actual results could differ materially from those set forth in the forward-looking statements.***

The Houston Airport System cannot predict (i) the duration or extent of the Pandemic or another outbreak or pandemic; (ii) the scope or duration of restrictions or warnings related to air travel, gatherings or any other activities, and the duration or extent to which airlines will reduce services to and from the Houston Airport System’s airports, or whether airlines will cease operations at the Houston Airport System’s airports or shut down in response to such restrictions or warnings; (iii) what effect Pandemic-related restrictions or warnings may have on air travel, including to and from the Houston Airport System’s airports, and costs and revenues of the Houston Airport System; (iv) whether and to what extent the Pandemic may disrupt the local, state, national or global economy, manufacturing or supply chain, or whether any such disruption may adversely impact construction, costs, sources of funds, schedule or implementation of the Houston Airport System’s capital improvement program or other operations of the Houston Airport System; (v) the extent to which the Pandemic or another outbreak or pandemic, or the resultant disruption to the local, state, national or global economy, may result in changes in demand for air travel, including long-term changes in consumer behavior, or may have an impact on the airlines or concessionaires serving the Houston Airport System, or the airline and travel industry, generally; (vi) whether or to what extent the Houston Airport System may provide additional deferrals, forbearances, adjustments or other changes to the Houston Airport System’s contracts with airlines and concessionaires; or (vii) whether any of the foregoing may have a material adverse effect on the finances and operations of the Houston Airport System.

Prospective investors should assume that the restrictions and limitations related to the Pandemic and the current upheaval in the air travel industry and the national and global economies may persist and possibly increase at least over the near term and recovery may be prolonged, thereby adversely impacting airport revenues. Future outbreaks, pandemics or

events outside the Houston Airport System’s control may further reduce demand for travel, which in turn could cause a continued decrease in passenger activity at the Houston Airport System’s airports and continued declines in Houston Airport System revenues.

### ***Estimates, Forecasts and Projections***

The estimates, forecasts and projections contained herein reflect management’s expected course of action from the date hereof through Fiscal Year 2024 and, in management’s judgment, fairly present the Houston Airport System’s expected financial results during such period based on the facts known to it as of the date hereof. However, any estimate, forecast or projection is subject to uncertainties; some assumptions might not be realized and unanticipated events and circumstances might occur. Therefore, differences between projected and actual results should be expected and those differences might be material and adverse to the Houston Airport System. None of the City, the management of the Houston Airport System or any person acting on either of their behalf makes any warranty, express or implied, with respect to the information, assumptions or projections contained herein.

### **Impact on Travel to and Revenues of Houston Airport System**

#### ***Impact on Net Revenues for Fiscal Year 2020***

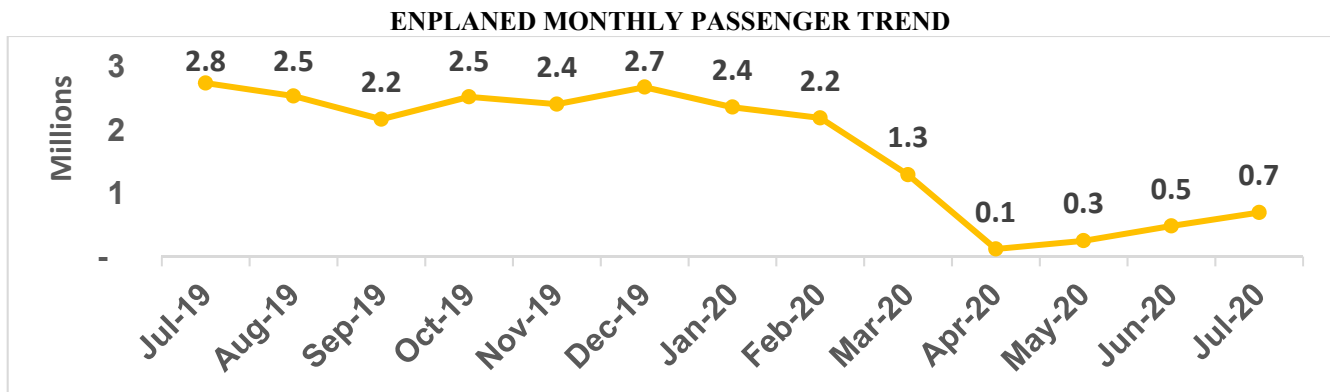
For Fiscal Year ending June 30, 2019, Net Revenues were approximately \$191 million; for Fiscal Year ending June 30, 2020, the Houston Airport System estimates Net Revenues were approximately \$168 million. The decrease in Net Revenues principally resulted from the decrease in enplanements caused by the COVID-19 pandemic in the fourth quarter of Fiscal Year 2020. See “– Federal Support for Airports and Airlines (CARES Act)” below. See also “HOUSTON AIRPORT SYSTEM OPERATING STATISTICS – Schedule 5” herein.

#### ***Passenger Statistics***

Passenger traffic at Intercontinental and Hobby has declined substantially since March 2020. The table below sets forth originating and connecting enplaned passengers for Intercontinental and Hobby for March 2020 through July 2020, including the percentage change for each respective month when compared to the same month in 2019.

	March		April		May	
	2020	Change 2019	2020	Change 2019	2020	Change 2019
<b>Intercontinental</b>						
Originating Enplaned	563,375	-47%	58,326	-94%	96,617	-92%
Connecting Enplaned	430,908	-52%	31,607	-96%	84,750	-90%
Total Enplaned Passengers	994,283	-50%	89,933	-95%	181,367	-91%
<b>Hobby</b>						
Originating Enplaned	213,346	-51%	24,167	-94%	54,690	-88%
Connecting Enplaned	88,350	-56%	6,972	-96%	15,878	-92%
Total Enplaned Passengers	301,696	-52%	31,139	-95%	70,568	-89%
<b>Houston Airport System</b>						
Originating Enplaned	776,721	-48%	82,493	-94%	151,307	-91%
Connecting Enplaned	519,258	-53%	38,579	-96%	100,628	-90%
Total Enplaned Passengers	1,295,979	-50%	121,072	-95%	251,935	-90%
	June		July			
	2020	Change 2019	2020	Change 2019		
<b>Intercontinental</b>						
Originating Enplaned	158,866	-87%	312,931	-75%		
Connecting Enplaned	136,114	-84%	173,396	-80%		
Total Enplaned Passengers	294,980	-86%	486,327	-77%		
<b>Hobby</b>						
Originating Enplaned	137,030	-69%	143,483	-67%		
Connecting Enplaned	54,440	-74%	69,637	-67%		
Total Enplaned Passengers	191,470	-71%	213,120	-67%		
<b>Houston Airport System</b>						
Originating Enplaned	295,896	-82%	456,414	-73%		
Connecting Enplaned	190,554	-82%	243,033	-77%		
Total Enplaned Passengers	486,450	-82%	699,447	-75%		

The table below sets forth the monthly trend for originating and connecting enplaned passengers for Intercontinental and Hobby from July 2019 through July 2020.

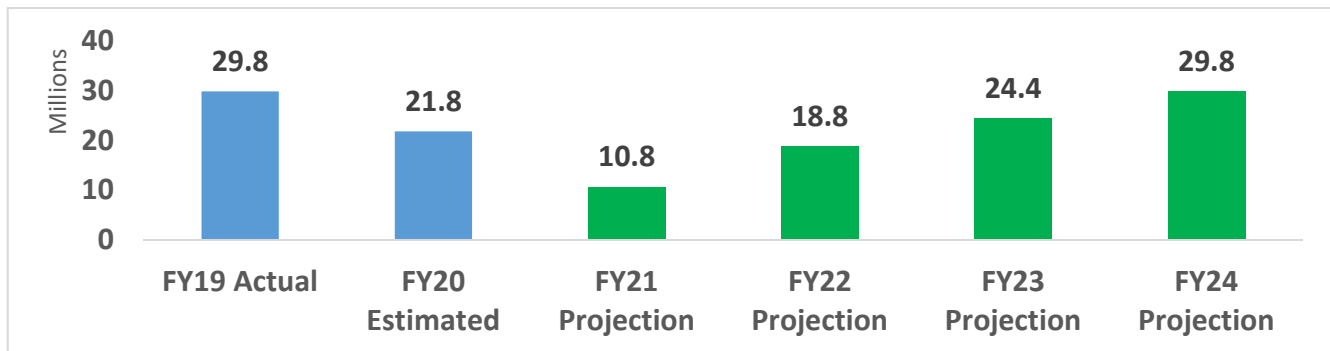


Source: Houston Airport System.

### *Projected Enplanements*

The Houston Airport System has used the long-term enplanement projections presented below to facilitate financial planning. The projections combine projections for Intercontinental and Hobby and are based upon information and assumptions regarding recovery in airline traffic provided by the airline trade association, the International Air Transport Association (“IATA”). Key information and assumptions, as released by IATA on July 28, 2020, reflect a slower recovery in airline traffic than previously expected. The IATA projects that global passenger traffic (revenue passenger kilometers or RPKs) will not return to pre-COVID-19 levels until 2024 and short-haul travel will recover faster than long haul travel. Factors such as the degree of virus containment in important emerging economies (which, in combination with the U.S. economy, represent around 40% of the global air travel market), constraints on corporate travel budgets and weak consumer confidence could cause actual results to be worse than these assumptions.<sup>1</sup>

### PROJECTED ENPLANEMENTS



Source: Houston Airport System.

See “HOUSTON AIRPORT SYSTEM OPERATING STATISTICS – Schedule 1A – Total Enplaned Passengers for the Houston Airport System” for originating and connecting enplaned passengers for Intercontinental and Hobby over the most recent five fiscal years and the estimate for Fiscal Year 2020.

### *Impact of Enplanements on Airline Revenues and Non-Airline Revenues*

Reductions in passenger enplanements directly impact the Houston Airport System’s revenues from parking, rental cars and other airport concessions. Parking revenues declined 79% at Intercontinental and 78% at Hobby from March 2020 through June 2020, as compared to the same period in 2019. Rental car revenues declined 69% at Intercontinental and 69% at Hobby from March 2020 through June 2020, as compared to the same period in 2019. Concession revenues declined 77% at Intercontinental and 71% at Hobby from March 2020 through June 2020, as compared to the same period in 2019.

<sup>1</sup> International Air Transport Association Press Release No: 63, dated July 28, 2020.

Specifically, for the months April through June 2020, non-airline revenues declined by \$42 million compared to the same period in 2019, or 70%.

As set forth in “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Schedule 5 – Selected Financial Information,” in Fiscal Year 2019, approximately 40% of Net Revenues were derived from parking, rental cars, airport concessions and other sources primarily made up of non-terminal facility rentals and ground rentals and approximately 60% of Net Revenues were derived from airline revenues. For Fiscal Year 2020, the Houston Airport System estimates approximately 38% of Net Revenues were derived from parking, rental cars, airport concessions and other sources primarily made up of non-terminal facility rentals and ground rentals and approximately 62% of Net Revenues were derived from airline revenues. The adopted Fiscal Year 2021 budget reflects 38% of Net Revenues derived from parking, rental cars, airport concessions revenues and other sources primarily made up of non-terminal facility rentals and ground rentals and approximately 62% of Net Revenues derived from airline revenues. See “– Fiscal Year 2021 Budget and Current Projections.”

As further described in “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements,” airline fees and rentals are calculated using a “compensatory” cost allocation, whereby airline fees equal the Houston Airport System’s operating and capital costs allocable to the airlines based on aircraft landed weights, enplaned passengers, deplaned passengers and area occupied within the airport. Therefore, airline revenues increase or decrease based on changes in operating and capital costs and are not directly affected by decreases in passenger enplanements.

### ***Gross Revenue Projections***

The chart below sets forth the Houston Airport System management’s estimates and projections regarding Gross Revenues through Fiscal Year 2024. See “– Fiscal Year 2021 Budget and Current Projections” below for the projected amount of Net Revenues for Fiscal Year 2021.

### **Gross Revenue Recent Results and Projections (in millions)**

	<b><u>FY 2019 (Audited)</u></b>	<b><u>FY 2020 (Estimate)<sup>(1)</sup></u></b>	<b><u>FY 2021 (Projected)</u></b>	<b><u>FY 2022 (Projected)</u></b>	<b><u>FY 2023 (Projected)</u></b>	<b><u>FY 2024 (Projected)</u></b>
Airline Revenues	\$269.3	\$288.0	\$194.8 <sup>(2)</sup>	\$274.9 <sup>(1)</sup>	\$303.6	\$312.6
Non-Airline and Other Revenues	\$248.9	\$205.5	\$125.9	\$191.1	\$237.0	\$282.1
Gross Revenues	\$518.2	\$493.5	\$320.7	\$466.0	\$540.6	\$594.7

(1) Unaudited.

(2) The reductions in Airline Revenues of approximately \$90 million and \$20 million in Fiscal Year 2021 and Fiscal Year 2022, respectively, as compared to Fiscal Year 2020, are expected as a result of the use of CARES Act revenues to offset costs allocable to the airlines.

See “– Forward-Looking Statements and Projections – *Estimates, Forecasts and Projections*” above.

### ***Impact on Scheduled Flights***

Schedule information under this subheading is provided by DiioMi by Cirium, which provides a database of published airline flight schedules, as regularly updated by the airlines. The database does not take into consideration flight cancellations made at the airlines’ discretion. It also does not provide a reliable indication of passenger traffic because load factors for any operated flights may have been lower than in periods prior to the Pandemic. The City cannot confirm that the data is correct and does not make any representation as to the accuracy or adequacy of the information provided under this subheading.

Based on data from DiioMi by Cirium, for the second quarter of 2019 (April-June), the Houston Airport System’s scheduled flights included 60,884 domestic and 12,023 international flights. Comparatively, for the second quarter of 2020 (April-June), the Houston Airport System’s scheduled service included 21,945 domestic and 1,135 international flights, representing a reduction of 64.0% and 90.6%, respectively.

The Houston Airport System experienced the deepest scheduled flight reductions due to COVID-19 in May 2020. The Houston Airport System had 5,724 domestic flights and 198 international flights, a year-over-year reduction of 72.5% and 95.0%, respectively. In the most recent schedule data available, the Houston Airport System has 10,369 domestic flights scheduled in September 2020, an 81% increase over May 2020, but still down nearly 9,500 flights (48%) from September 2019. Similarly, international schedules for September 2020 include 1,435 flights, an increase of over 625% from May 2020, but down nearly 2,100 flights (59%) from September 2019.

## **Management's Response**

Management of the Houston Airport System has taken a number of actions in response to the Pandemic and is actively reviewing a number of other responsive actions, including revising its spending and projections over the remainder of Fiscal Year 2021. Such actions would be driven by passenger activity levels and the resultant impact to non-airline revenues. Passenger activity levels and non-airline revenues are being monitored on a monthly basis. Management is prepared to make changes to budgeted expenses and capital projects, as appropriate.

### ***Expense Reductions***

In response to the Pandemic, the Houston Airport System reduced operating expenses by \$8 million or 10% of budgeted operating expenses for the fourth quarter of Fiscal Year 2020. The adopted budget for Fiscal Year 2021 includes a 3% or \$10 million reduction in operating expenses below Fiscal Year 2020. The Houston Airport System currently intends to further reduce operating expenses in Fiscal Year 2021 by approximately \$10 million and may seek further operating expense reduction in the event actual passenger enplanements at Intercontinental and Hobby are materially lower than what is currently estimated. See “– Fiscal Year 2021 Budget and Current Projections” below.

### ***Changes to Capital Improvement Program***

The City has not adopted a revised CIP for the Houston Airport System, but management expects to slow the rate of CIP spending through the end of Fiscal Year 2022. In addition, management has adopted a change to the Houston Airport System's CIP funding policy that prohibits the use of unrestricted cash as a funding source for capital improvements. See “CAPITAL IMPROVEMENT PROGRAM.”

### ***Relief to Airlines and Concessionaires***

Beginning April 2020, the City agreed to defer (but not abate or waive) the collection of terminal rent and landing fees from the airlines and receivables from concessionaires and rental car companies accrued for 90 days. Deferred receivables may be paid by December 31, 2020 without penalties or additional charges. Deferred receivables not paid by December 31, 2020 will incur interest at the higher of 1.5% or the 1-year Treasury Bill rate per annum. The City also has waived minimum annual guarantees required in contracts with concessionaires and rental car companies. The Houston Airport System estimates that such deferred payments from airlines, rental car companies and concessionaires will total approximately \$28.7 million. Waiver of the minimum annual guarantees associated with concession and car rental contracts will amount to approximately \$7 million in fee abatements. The airlines are otherwise current in their obligations to the Houston Airport System.

See also “– Federal Support for Airports and Airlines (CARES Act)” below for a discussion of the rate relief to be provided to airlines through the allocation of CARES Act grant funds.

### ***Operational Response***

In response to the Pandemic, the Houston Airport System has implemented various health and safety measures, including touchless (biometric) boarding procedures.

## **Federal Support for Airports and Airlines (CARES Act)**

### ***Airports***

The FAA has announced that the Houston Airport System is eligible to receive approximately \$200 million of CARES Act funds for reimbursement of costs related to authorized airport purposes, including operation and maintenance expenses and debt service payments. The Houston Airport System received approximately \$8.0 million of CARES Act funds in Fiscal Year 2020, and expects to request grants in the approximate amounts of \$152.0 million during Fiscal Year 2021 (of which \$78 million have already been applied for) and \$40.0 million in Fiscal Year 2022. Actual amounts of CARES Act funds to be received are subject to change. See “– Fiscal Year 2021 Budget and Current Projections” below.

The \$8.0 million of CARES Act funds received in Fiscal Year 2020 were used to offset Debt Service Requirements on Outstanding Subordinate Lien Bonds. The City expects that approximately \$125.4 million of the \$152.0 million of CARES Act grant funds to be received during Fiscal Year 2021 will be used to offset Debt Service Requirements on the Subordinate Lien Bonds and the remainder will be used to offset Operations and Maintenance expenses. Management has not made a determination regarding the allocation of CARES Act grant funds received in Fiscal Year 2022. CARES Act funds are treated as a grant and not a part of Gross Revenues. See “COVENANTS AND TERMS OF THE ORDINANCE – Rate Covenant”



and “– Additional Airport Obligations” for a discussion of the impact of the reduction of Debt Service Requirements on the Rate Covenant calculation and the capacity to issue additional bonds. See also APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.

As described above under “– Impact on Travel to and Revenues of Houston Airport System,” airline revenues are based on the total of all operating and capital costs allocable to each facility used by the airlines. The Houston Airport System may allocate CARES Act grant funds to reduce the costs allocable to the facilities used by the airlines, which would have the effect of reducing airline revenues by an equal amount. For Fiscal Year 2021, the Houston Airport System expects that the use of the \$152 million in CARES Act grant funds will result in a reduction in the costs allocable to the airlines of about \$90 million. Management has not made a determination regarding how much of the CARES Act grant proceeds to be received in Fiscal Year 2022 will be allocated in a manner that will reduce costs allocable to the airlines, thereby reducing airline revenues.

### *Airlines*

The CARES Act also includes approximately \$50 billion of federal aid for airlines in the United States. Prospective purchasers of the Series 2020 Bonds should review the SEC information and reports of the airlines. This reference to the airlines’ SEC information and reports is for informational purposes only, and such reports shall not be deemed incorporated herein by reference. See “THE AIRLINE INDUSTRY FINANCIAL INFORMATION.”

### **Liquidity**

#### *Cash on Hand*

As of June 30, 2020, the Houston Airport System had cash on hand equal to \$449.9 million, representing 470 Days Cash on Hand (unaudited), which included \$65.8 million of restricted cash and investments (unaudited), including two months’ current Operation and Maintenance Expenses required to be maintained in the Operations and Maintenance Reserve Fund and \$10 million required to be maintained in the Renewal and Replacement Fund.

As of June 30, 2019, the Houston Airport System had cash on hand equal to \$485.4 million, representing 545 Days Cash on Hand, which included \$65.8 million of restricted cash and investments including two months’ current Operation and Maintenance Expenses required to be maintained in the Operations and Maintenance Reserve Fund and \$10 million required to be maintained in the Renewal and Replacement Fund.

See “SECURITY FOR THE SERIES 2020 BONDS – Additional Reserves and Other Funds” relating to the Operations and Maintenance Reserve Fund and the Renewal and Replacement Fund. See also “DEBT SERVICE REQUIREMENTS OF HOUSTON AIRPORT SYSTEM – Schedule 8A: Cash and Liquidity” herein.

### **Fiscal Year 2021 Budget and Current Projections**

The following describes the Fiscal Year 2021 budget adopted on June 10, 2020 and the expectations with respect to the Fiscal Year 2021 results as of the date hereof. As set forth above under “– Management’s Response,” in response to reductions in actual passenger activity levels below those currently being estimated and the resulting impact on revenues, the Houston Airport System may further reduce expenses, delay projects and take other measures to reduce costs or allocate CARES Act funds in a manner that will increase Net Revenues.”

#### *Adopted Fiscal Year 2021 Budget*

City Council approved the Fiscal Year 2021 budget for the Houston Airport System on June 10, 2020. As part of the City’s budget, the Houston Airport System Fiscal Year 2021 budget projects 10.8 million enplaned passengers for the Houston Airport System (8.1 million at Intercontinental and 2.7 million at Hobby). For comparison, Fiscal Year 2019 ended with 29.8 million enplaned passengers and Fiscal Year 2020 ended with 21.8 million enplaned passengers. See “– Impact on Travel to and Revenues of Houston Airport System” above and “HOUSTON AIRPORT SYSTEM OPERATING STATISTICS – Schedule 1A – Total Enplaned Passengers for the Houston Airport System.”

The adopted Fiscal Year 2021 budget includes a reduction of expenses of approximately 3% (approximately \$10 million) when compared to Fiscal Year 2020 and a reduction in Gross Revenues of approximately 11.8% when compared to Fiscal Year 2020.

### ***Current Projections***

Although the adopted Fiscal Year 2021 budget has not been formally amended, Houston Airport System management has revised its projections relating to Operations and Maintenance Expenses and Gross Revenues for Fiscal Year 2021.

The current forecast for Fiscal Year 2021 provides Net Revenues equal to \$22.2 million. CARES Act funds in the amount of \$125.4 million along with PFC offsets of \$57.7 million will be used to pay all of the Debt Service Requirements on Subordinate Lien Bonds in Fiscal Year 2021. The current forecast for Fiscal Year 2021 Operation and Maintenance expenses of \$298.5 million represents a reduction of 8.3% when compared to the estimate for Fiscal Year 2020. The forecast for Fiscal Year 2021 Gross Revenues of \$320.7 million represents a reduction of 35% when compared to the estimate for Fiscal Year 2020. See “– Impact on Travel to and Revenues of Houston Airport System – *Gross Revenue Projections*” for current projections of Gross Revenue for Fiscal Year 2021.

CARES Act funds of \$26.6 million are expected to be used to offset Operations and Maintenance expenses in Fiscal Year 2021, with \$125.4 million to be used to offset Debt Service Requirements on the Subordinate Lien Bonds. The Fiscal Year 2021 forecast anticipates the use of the CARES Act proceeds as described herein and under “– Federal Support for Airports and Airlines (CARES Act)” will result in a \$90 million offset to fees customarily paid by airlines; without the expected use of CARES Act funds, airline revenues and Gross Revenues would be expected to be increased by \$90 million.

### **Impact on PFC Revenues**

As discussed below under “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Sources of Revenues – *PFC Revenues*,” the City imposes a PFC of \$4.50 per eligible enplaned passenger at both Intercontinental and Hobby. Reduced passenger enplanements will impact PFC Revenues, which, over a period of years, could result in smaller commitments of PFC Revenues to reduce Debt Service Requirements on the Subordinate Lien Bonds, which would in turn impact debt service coverage ratios in future years. “SECURITY FOR THE SERIES 2020 BONDS – General” and “COVENANTS AND TERMS OF THE ORDINANCE – Rate Covenant.”

As set forth in “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Schedule 5 – Selected Financial Information,” the Houston Airport System committed approximately \$60.6 million of PFC Revenues to reduce Debt Service Requirements on the Subordinate Lien Bonds in Fiscal Year 2019, and an estimated \$54.0 million for Fiscal Year 2020. For the months April through June 2020, PFC Revenues declined \$18.7 million or 63% compared to the same period in 2019 (there is a one-month lag between actual passenger levels and receipt of PFC Revenues).

For Fiscal Year 2021, the City has budgeted for the receipt of approximately \$85 million in PFC Revenues, but currently projects to receive an estimated \$40.2 million. The Houston Airport System has committed approximately \$58 million of PFC Revenues, including amounts from current account balances of previously collected PFC Revenues, to reduce Debt Service Requirements on the Subordinate Lien Bonds in Fiscal Year 2021.

As of June 30, 2020, the aggregate account balances for PFC collections were approximately \$265 million at Intercontinental and \$34 million at Hobby, which the Houston Airport System projects will be sufficient to maintain the planned level of reductions to Debt Service Requirements on the Subordinate Lien Bonds for Fiscal Years 2021 and 2022, based on current projections of passenger levels. See “CAPITAL IMPROVEMENT PROGRAM – Schedule A: PFC Collections.” See also “– Forward-Looking Statements and Projections” above

## **CAPITAL IMPROVEMENT PROGRAM**

### **General Discussion**

The City updates and adopts annually a rolling five-year comprehensive plan that determines and prioritizes its capital and infrastructure needs, including the Houston Airport System. In connection with updates to its master plans for its airports, the Houston Airport System publishes its Capital Improvement Program (“CIP”) extending past the City’s five-year requirement, which is described below. The Houston Airport System continuously monitors and adjusts its CIP based upon financial capacity, air travel demand and airline industry developments. From 2000 to 2010, the Houston Airport System undertook a major renovation, modernization and expansion project at all three airports totaling approximately \$2.8 billion. At Intercontinental, the City built, among other projects, two new air carrier runways and related airfield expansions and improvements; a new international arrivals facility; an extended automated people mover system; and expansions and renovations to existing terminal, garage, and support facilities. At Hobby, the City constructed a new central concourse, substantially expanded the main terminal building, and completed various runway and taxiway improvements. At Ellington,

the City made various airfield improvements. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” and “INVESTMENT CONSIDERATIONS.”

## Master Plans

The Houston Airport System completed updates to the Intercontinental, Hobby, and Ellington Master Plans in 2014 and 2015. These long-term development plans are generally demand-driven (with respect to activity levels), time-driven (with respect to facility condition), and consistent with management’s strategic goals. Projects are identified as needed when a pre-defined demand level is reached, but are revalidated before implementation in the then-current operating environment.

## CIP Projects

The adopted CIP, which covers Fiscal Year 2021 through Fiscal Year 2025 (“Fiscal Year 2021-2025 CIP”), is comprised of approximately \$2.5 billion in projects. The major projects in the Fiscal Year 2021-2025 CIP include the following:

### Major Projects as Shown in Fiscal Year 2021-2025 CIP (dollars in millions)

<u>Airport</u>	<u>Description</u>	<u>Amount</u>
Intercontinental	Intercontinental Terminal Redevelopment Program	\$ 817
	Terminal A Modernization and Expansion	583
	Terminal B Phase III Apron	177
	Runway, Taxiway and Airfield Projects	137
	Parking, Ground Transportation and Other Improvements	112
Hobby	International Concourse Expansion	234
	Consolidated Rental Car Facility	204
	Runway, Taxiway and Airfield Projects	116
	Other Improvements	20
Ellington	Improvements and Spaceport	9
Administration	System Support	81
<b>Total</b>		<b>\$2,490</b>

*Intercontinental Capital Improvement Program.* The Intercontinental Terminal Redevelopment Program (“ITRP”) includes renovation and expansion of Terminal D, the Mickey Leland International Terminal, which opened in 1990, to provide needed additional wide-body aircraft-capable gates and terminal facilities. Terminal D will be renovated and expanded in phases with the demolition of the original C-North concourse providing the footprint for a new international-capable pier, and adjacent aircraft parking aprons. The renovated facility is anticipated to offer up to 13 wide-body gates versus the six that are available today. Terminal D will provide approximately 560,000 square feet of space and up to 13 gates capable of accommodating wide-body aircraft, up to two of which will be A380-capable (with restrictions on the use of adjacent gate(s)). All gates will be connected to the Central FIS Facility and be capable of accommodating both domestic and international flights. Terminal D also will include improved concessions, club rooms and other passenger amenities.

Intercontinental’s Central FIS Facility will be renovated and enlarged to provide a new check-in facility for both United and the foreign flag carriers using Terminal D, improve arriving international passenger flows through primary and secondary processing functions and facilitate the use of automated passport control technology. Passenger security screening checkpoints from Terminal D and for United’s international departing and connecting passengers will be consolidated into a single checkpoint. A new baggage handling system will be installed and a new baggage claim annex will be constructed to provide four additional baggage claim units. After removal of one existing baggage claim unit during reconfiguration, 14 units will be provided, four with the capacity for A380 aircraft. A separate baggage claim area with room for four claim units, two of which will be installed initially, will be provided for domestic and precleared passengers at Terminals D and E.

Terminal C North (a new Terminal B North Concourse building) occupied by and leased to United, opened in May 2017. Terminal C North was constructed to the west of the original C North concourse to replace domestic gates that will be redeveloped as part of the Terminal D development. The new concourse provides 280,000 square feet of space on two levels (including a renovated portion of the original C North concourse), an increase of 40,000 square feet over the original concourse. The new Terminal C North concourse provides 14 domestic gates, compared with 13 gates at the original concourse. The project included reconstruction of the apron and utilities and installation of equipment to allow bags to be transferred from the new concourse to the baggage sortation complex at Terminal C. The original C-North concourse was demolished in the second quarter of calendar year 2020. The Terminal B Phase III Apron project is the City's obligation to fund the aircraft apron portion of the Terminal B expansion program being undertaken by United. See "HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements – *Intercontinental Terminal B Improvement Projects and Special Facilities Lease Agreement*" for a description of the third and final phase of the Terminal B Improvement Projects United may construct at its expense.

The Terminal A Modernization project includes upgrades of facilities such as passenger boarding bridges, aircraft support systems, restrooms, holdrooms, baggage handling systems, etc. The Terminal A Domestic Expansion project will provide gate expansion on the South Concourse and the west side of Terminal A.

Improvements to utility supply and distribution systems are required for the entire Intercontinental terminal complex as well as to enable implementation of the renovation of Terminal D and other ITRP elements. Roadway and signage improvements and other landside projects will also be implemented as part of ITRP.

The Houston Airport System is investigating options for building a new electrical power generating plant and distribution system to serve the Intercontinental terminal complex through a design, build, operate, and maintain contract, with financing to be provided from private sources.

*Hobby Capital Improvement Program.* The Houston Airport System completed an update to the Master Plan for Hobby in 2015. Key airfield projects in the Hobby Master Plan include the relocation, widening and extension of Runway 12L 30R from a general aviation runway to a full air carrier-capable runway 8,000 feet long and 150 feet wide with a full-length parallel taxiway. Land needs to be acquired at the southeast end of the extended runway in order for the runway protection zone and air navigation aids to be relocated. Following the construction of Runway 12L 30R, Runway 17-35 will be decommissioned. Construction of the extended runway is not planned until after 2023, but planning and environmental studies are included in the CIP. Other airfield projects in the CIP are the reconstruction of Runway 12R-30L and the rehabilitation of taxiway and apron pavement.

The Hobby Master Plan provides for expansion of the international concourse and apron to add up to seven gates (for a total of 12 gates). Terminal projects included in the CIP are construction of a canopy over the curbside roadways and various rehabilitation projects.

Construction of a consolidated rental car center is included in the CIP. Subject to agreement with the rental car companies on scope and funding, the center would include a customer service building, a parking structure for ready and return spaces, and a quick turnaround area. Houston Airport System management anticipates that the project would be funded with special facilities debt and would not be an obligation secured by Net Revenues. See "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Impact on Travel to and Revenues of Houston Airport System – *Airport System Revenues*," "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Management's Response – *Relief to Airlines and Concessionaires*" and "HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Other Significant Airport Agreements – *Rental Car Facilities at Intercontinental*."

*Ellington Capital Improvement Program.* The Houston Airport System completed an update to the Master Plan for Ellington in 2015. Projects in the Ellington Master Plan (not expected to be implemented until after 2023) include the extension of Runway 17R 35L to 10,000 feet, land acquisition for a runway protection zone for the extended runway, construction of a full-length taxiway parallel to Runway 4-22, reconfiguration of other airfield facilities, construction of additional general aviation hangars, and development of infrastructure to enable future spaceport and other commercial development. Near-term projects include new control tower construction, roadway improvements and airfield pavement rehabilitation.

Acquisition of available land near Ellington would allow eventual development of facilities for research, engineering, manufacturing and related aerospace activities at a 400-acre campus. In 2015, as part of the first phase of campus development, the City acquired a light manufacturing and office building from the Boeing Company. The Houston Airport System renamed the building the Houston Aerospace Support Center and is modifying it to provide 53,000 square feet of space for offices, laboratories, and fabrication facilities.

## CIP Project Funding

<b>CIP Funding Sources</b>	
<b>Funding Source*</b>	<b>FY 2021-2025 (\$'s in millions)*</b>
Airport Improvement Fund	\$ 218.2
Renewal and Replacement Fund	40.4
Bonds/Commercial Paper	1,487.6
Pay-Go PFCs	406.8
AIP/FAA Grants	133.4
Special Facility Debt	203.7
<b>Total</b>	<b>\$2,490.0</b>

\* CIP funding sources, as shown, are based on the original CIP submitted for approval; preliminary, subject to change.

The Houston Airport System anticipates funding the Fiscal Year 2021-2025 CIP from multiple sources, including available cash in the Airports Improvement Fund (“AIF”) and Renewal and Replacement Fund, entitlement and discretionary grants and awards from the FAA and the Transportation Security Administration, PFC Revenues, and bond proceeds. However, in response to the Pandemic, management has adopted a change to the CIP funding policy that prohibits the use of unrestricted cash (i.e. available cash in the AIF) as a funding source for capital improvements. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Management’s Response.” The Houston Airport System also anticipates issuing Senior Lien Notes to fund projects on an interim basis, with such Senior Lien Notes being periodically refinanced into permanent financing. See “INTRODUCTION – Senior Lien Obligations and Inferior Lien Bonds” for a description of the Senior Lien Notes and related letter of credit.

While the current CIP anticipates the issuance of additional general airport revenue bonds to finance certain capital expenditures, the timing and structure of any new bond issue is uncertain and depends upon, among other things, market considerations, the amount of cash generated internally by the Houston Airport System, and the timing and scope of projects in the CIP, in particular those relating to the ITRP.

### PFC Revenues

As described under “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Sources of Revenues – PFC Revenue,” the City currently collects PFC Revenues for existing capital improvements and has submitted an application to the FAA for authority to impose and use PFCs for future capital improvements, including for the ITRP and other projects in the CIP. The City is authorized to use PFC Revenues to (a) pay debt service on outstanding bonds issued for certain completed Intercontinental projects; (b) reimburse the Houston Airport System for the unamortized costs of certain other Intercontinental projects that were originally funded from the Houston Airport System’s resources, such as the AIF; (c) provide pay-as-you-go funding of the local share of the costs of certain planned future projects; and (d) pay debt service on commercial paper and future bonds to finance certain projects. Hobby also is authorized to use and is collecting PFC Revenues to pay debt service. See below.

The City’s authority to impose and use PFCs at both Intercontinental and Hobby is subject to certain terms and conditions in the federal PFC authorizing legislation, the PFC regulations adopted by the FAA and specific FAA approvals applicable to the Intercontinental and Hobby PFC programs. If the City fails to comply with any of these requirements, the failure could reduce or terminate the City’s authority to impose PFCs at one or both airports and use such PFCs to finance a portion of the CIP.

The City imposes a PFC of \$4.50 per enplaned passenger at both Intercontinental and Hobby. The City has authority to impose and use \$1,372,445,143 of PFCs collected at Intercontinental through January 1, 2028 and the authority to impose and use \$736,300,640 of PFCs collected at Hobby through September 1, 2038. On May 29, 2020, the City submitted an application to the FAA to impose and use PFC’s at Intercontinental beginning January 1, 2028 through May 1, 2039, which application was declared substantially complete on June 19, 2020. If approved, the application would give the City the authority to impose and use an estimated \$1,446,347,957 of PFCs collected at Intercontinental. The FAA has advised the City that it will be notified of the FAA’s approval or disapproval of the application no later than September 26, 2020.

The City is authorized to use PFC revenues to (a) pay debt service on outstanding bonds issued for certain completed Intercontinental projects; (b) reimburse the Houston Airport System for the unamortized costs of certain other Intercontinental projects that were originally funded from the Houston Airport System’s resources, such as the AIF; (c) provide pay-as-you-

go funding of the local share of the costs of certain planned future projects; and (d) pay debt service on commercial paper and future bonds to finance certain projects.

As of June 30, 2020, the aggregate account balances for PFC collections were approximately \$265 million at Intercontinental and \$34 million at Hobby. These funds are scheduled to be used to either pay future debt service for projects already approved by the FAA or pay the local share of capital projects approved by the FAA on a pay-as-you go basis. Historical PFC collections for the Houston Airport System are shown below.

#### Schedule A: PFC Collections

##### Houston Airport System PFC Collections (dollars in thousands)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 (Unaudited) <sup>(1)</sup>
Intercontinental	\$66,491	\$ 80,574	\$ 77,351	\$ 83,220	\$ 85,167	\$ 60,908
Hobby	18,901	23,656	24,188	25,801	25,988	17,895
Total	\$85,392	\$104,230	\$101,539	\$109,021	\$111,155	\$ 78,818
Year-over-Year Change	36.40%	22.06%	-2.58% <sup>(2)</sup>	7.37%	9.47%	-29.1%

(1) See "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM."

(2) See "HOUSTON AIRPORT SYSTEM OPERATING STATISTICS" for a description of the reasons causing the decrease.

Source: Houston Airport System audited financial statements.

For a discussion of the treatment of PFC Revenues under the Ordinance, see APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE. See "HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Schedule 5: Selected Financial Information" for the historical amounts of PFC Revenues committed to pay Debt Service Requirements and the impact on debt service coverage ratios. See also "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM."

#### Grants under the FAA Airport Improvement Program and Other Programs

The City has been awarded, on behalf of the Houston Airport System, numerous grants under the FAA Airport Improvement Program, including Voluntary Airport Low Emissions grant funding, and awards from the Transportation Security Administration. Eligible projects include runway and taxiway rehabilitation, noise mitigation, environmental impact studies and security projects. The Houston Airport System has recognized capital contributions from these programs totaling over \$131 million over the prior five fiscal years ending Fiscal Year 2019. Grant funds are not available for payment of debt service.

See also "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Federal Support for Airports and Airlines (CARES Act)."

#### HOUSTON AIRPORT SYSTEM OPERATING STATISTICS

According to the U.S. Department of Transportation, Intercontinental and Hobby ranked 14th and 35th among U.S. airports, respectively, based on total enplaned passengers in calendar year 2018.

Total enplaned passengers for the Houston Airport System decreased by 26.8% to 21.8 million during Fiscal Year 2020 compared to Fiscal Year 2019. During this same period, total enplaned passengers at Hobby decreased 27.7% to 5.3 million. Total enplaned passengers decreased by 26.5% at Intercontinental to 16.5 million. See "Schedule 1A – Total Enplaned Passengers for the Houston Airport System."

United and its regional partners, collectively, accounted for approximately 76.0% of total passengers at Intercontinental in Fiscal Year 2020. Southwest accounted for 94.4% of total passengers at Hobby in Fiscal Year 2020. See "– Schedule 1: Passenger Statistics" and "– Schedule 2: Airline Market Shares."

See "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM."

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## Airlines Utilizing the Houston Airport System

The table below shows the passenger airlines that provided scheduled service as of January 2020 from either Intercontinental or Hobby. As of January 2020, the scheduled passenger airlines that serve Houston averaged 5,356 weekly aircraft departures (including seasonal and non-daily scheduled service), serving 116 domestic destination airports, including all major U.S. cities. The airlines also provided service to 66 international destinations, and currently serve or expect to serve cities in Mexico, Central America, South America, Canada, Europe, Asia, Middle East, Australia and Africa. The breakdown of destinations served from Intercontinental in January 2020 was 112 domestic and 66 international, and for Hobby, the breakdown was 51 domestic and 7 international flights. All of the mainline carriers shown below have signatory airline status under various use and lease agreements, except for Alaska Airlines and jetBlue. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” regarding limits on current activity.

Intercontinental			Hobby	
Mainline Carriers	Regional Carriers	Cargo Carriers	Mainline Carriers	Regional Carriers
Aeromexico	Aerolitoral	Air France Cargo	American Airlines	Envoy Air Inc
Air Canada	Compass Airlines	Atlas Air	Delta Air Lines	Mesa Airlines
Air China	Endeavor Air	CargologicairAir	Southwest Airlines	SkyWest Airlines
Air France	Envoy Air Inc.	BridgeCargo		
Air New Zealand	ExpressJet Airlines	Cargolux		
Alaska Airlines	GoJet Airlines	Cathay Pacific Cargo		
All Nippon Airways	Jazz Air	China Airlines		
American Airlines	TACA Intl	DHL		
AVIANCA	Mesa Airlines	Emirates SkyCargo		
Boutique	Republic Airlines	Federal Express		
British Airways	SkyWest Airlines	Lufthansa Cargo		
Delta Air Lines	Avianca Costa Rica	Qatar Cargo		
Emirates	Avianca Peru	UPS		
Ethiopian Airlines	PSA Airlines	CAL Cargo		
EVA Air	Sky Regional	Turkish Cargo		
Frontier Airlines				
InterJet				
jetBlue				
KLM Royal Dutch Airlines				
Lufthansa				
Qatar Airways				
Singapore Airlines				
Spirit Airlines				
Turkish Airlines				
United Airlines				
VivaAerobus				
Volaris				
WestJet				

Source: Houston Airport System

### *United Airlines*

United is the busiest airline at Intercontinental and, together with its regional affiliates, enplaned 75.8% of total enplaned passengers in Fiscal Year 2020 and 77.5% of total enplaned passengers in Fiscal Year 2019. See “– Schedule 2: Airline Market Shares.” For a discussion of the sources of operating revenues for the Houston Airport System and the term of United’s use and lease agreements at Intercontinental, respectively, see “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Sources of Revenues” and “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements.”

Intercontinental is the 2nd busiest of United’s principal domestic airport hubs as measured by available seats, accounting for approximately 10.4% of United’s system-wide seats for the twelve months ending June 30, 2020. During this period at Intercontinental, United enplaned approximately 8.5 million passengers while its regional affiliates enplaned 4.1 million passengers, approximately 57% of whom were connecting from flights operated by United or its regional carriers.

The airline with the next highest market share at Intercontinental in Fiscal Year 2020 was Spirit Airlines, with an enplaned passenger market share of 6.2%.

See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” regarding the effect of the Pandemic.

### ***Southwest Airlines***

Southwest was the busiest airline at Hobby with 5.0 million enplanements in Fiscal Year 2020. Southwest carried 94.6% of the total Hobby passengers in Fiscal Year 2020, and 93.7% in Fiscal Year 2019. Southwest’s activity at Hobby accounted for 4.1% of Southwest’s system-wide seats in Fiscal Year 2020. The airline with the next highest market share at Hobby in 2020 was Delta Air Lines, with an enplaned passenger market share of 2.6%. See “– Schedule 2: Airline Market Shares.” For a discussion of the sources of operating revenues for the Houston Airport System and the term of Southwest’s use and lease agreement at Hobby, respectively, see “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION – Sources of Revenues” and “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS “– Airport Use and Lease Agreements and Special Facilities Lease Agreements – *Hobby Use and Lease Agreements.*”

See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” regarding the effect of the Pandemic.

The following schedules set forth certain statistical information regarding the Houston Airport System as provided by the City.

### **Schedule 1: Passenger Statistics**

Schedule 1 shows total passengers at Intercontinental and Hobby over the most recent five fiscal years. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

<b>Houston Airport System Total Passengers (in thousands)</b>					
<b>Intercontinental Domestic Passengers</b>	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(1)</sup>
Enplaned and Deplaned	31,959	30,809	31,102	33,972	25,069
Year-over-Year Change	0.0%	-3.6%	1.0%	9.2%	-26.2%
<b>Intercontinental International Passengers</b>					
Enplaned and Deplaned	10,904	10,662	10,404	10,939	7,969
Year-over-Year Change	8.8%	-2.2%	-2.4%	5.1%	-27.2%
<b>Total Intercontinental Passengers*</b>					
Enplaned and Deplaned	42,860	41,471	41,506	44,911	33,037
Year-over-Year Change	2.1%	-3.4%	0.8%	8.2%	-26.4%
<b>Hobby Domestic Passengers</b>					
Enplaned and Deplaned	12,209	12,423	12,864	13,628	9,994
Year-over-Year Change	3.1%	1.8%	3.5%	5.9%	-26.7%
<b>Hobby International Passengers</b>					
Enplaned and Deplaned	519	860	957	966	591
Year-over-Year Change	12,875%	65.7%	11.3%	0.9%	-38.8%
<b>Total Hobby Passengers</b>					
Enplaned and Deplaned	12,728	13,284	13,821	14,594	10,585
Year-over-Year Change	7.5%	4.4%	4.0%	5.6%	-27.5%
<b>Total Airport System Passengers*</b>					
Enplaned and Deplaned	55,591	54,754	55,327	59,505	43,622
Year-over-Year Change	3.3%	-1.5%	1.0%	7.6%	-26.7%

Source: Houston Airport System

\*Numbers may not total exactly due to rounding.

(1) Fiscal Year 2020 preliminary statistics.



## Schedule 1A: Total Enplaned Passengers for the Houston Airport System

Schedule 1A shows originating and connecting enplaned passengers for Intercontinental and Hobby over the most recent five fiscal years. The enplaned originating percentage has generally stayed within a relatively narrow range for both airports.

### Houston Airport System Total Originating and Connecting Enplaned Passengers<sup>(1)</sup> (in thousands)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(2)</sup>
<b>Intercontinental</b>					
Originating Enplaned	11,129	11,105	11,332	12,411	9,275
Connecting Enplaned	10,301	9,599	9,44	10,067	7,252
Total Enplaned Passengers	21,430	20,704	20,775	22,478	16,527
Enplaned Originating Percentage	51.9%	53.6%	54.5%	55.2%	56.12%
<b>Hobby</b>					
Originating Enplaned	4,696	4,853	4,829	4,996	3,655
Connecting Enplaned	1,687	1,807	2,107	2,333	1,645
Total Enplaned Passengers	6,383	6,660	6,937	7,329	5,300
Enplaned Originating Percentage	73.6%	72.9%	69.6%	68.2%	68.96%
<b>Houston Airport System</b>					
Originating Enplaned	15,824	15,958	16,162	17,407	12,929
Connecting Enplaned	11,988	11,406	11,550	12,400	8,897
Total Enplaned Passengers	27,813	27,364	27,712	29,807	21,827
Enplaned Originating Percentage	56.9%	58.3%	58.3%	58.4%	59.23%

Source: Houston Airport System

\*Numbers may not total exactly due to rounding.

- (1) Estimates of originating and connecting passengers (and originating percentages) presented above are as reported by the airlines to the Houston Airport System.
- (2) Fiscal Year 2020 preliminary statistics.

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## Schedule 2: Airline Market Shares

Schedule 2 shows airline passenger market shares for the Houston Airport System over the most recent five fiscal years. United and Southwest have maintained leading market shares at Intercontinental and Hobby, respectively, over the period.

<b>Houston Airport System Market Share Data (in thousands)</b>					
	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020<sup>(1)</sup></u>
<b>Total Passengers-Intercontinental</b>					
Domestic					
United and affiliates	25,561	24,698	24,787	27,274	19,620
Delta and affiliates	1,460	1,475	1,528	1,589	1,285
American and affiliates	2,618	2,245	2,288	2,464	1,846
All Other Airlines	2,319	2,390	2,499	2,646	2,318
Subtotal Domestic Passengers*	31,959	30,809	31,102	33,972	25,069
International					
United and affiliates	7,690	7,433	7,307	7,520	5,461
Air Canada/Jazz	290	303	350	330	231
British Airways	243	241	227	239	160
Emirates	253	203	207	261	178
Lufthansa	278	292	279	291	187
AeroMexico	255	256	155	143	116
Air France	144	153	146	157	105
Qatar	160	155	155	157	134
KLM	156	165	165	175	117
Singapore	79	83	94	92	62
All Others	1,350	1,324	1,319	1,574	1,218
Subtotal Int'l Passengers*	10,900	10,606	10,404	10,939	7,969
Total (Domestic and International)*	42,860	41,415	41,506	44,912	33,038
<b>Market Share-Intercontinental</b>					
Domestic					
United and affiliates	59.6%	59.6%	59.7%	60.7%	59.4%
Delta and affiliates	3.4	3.6	3.7	3.5	4.0
American and affiliates*	6.1	5.4	5.5	5.5	6.0
All Other Airlines	5.4	5.8	6.0	5.9	7.0
Subtotal Domestic Passengers*	74.5%	74.4%	74.9%	75.6%	75.9%
International					
United and affiliates	18.0%	17.9%	17.6%	16.7%	17.0%
Air Canada/Jazz	0.7	0.7	0.8	0.7	0.7
British Airways	0.6	0.6	0.5	0.5	0.5
Emirates	0.6	0.5	0.5	0.6	0.5
Lufthansa	0.6	0.7	0.7	0.6	0.6
AeroMexico	0.5	0.6	0.4	0.3	0.4
Air France	0.3	0.4	0.4	0.3	0.3
Qatar	0.4	0.4	0.4	0.3	0.4
KLM	0.4	0.4	0.4	0.4	0.4
Singapore	0.2	0.2	0.2	0.2	0.2
All Others	3.2	3.2	3.2	3.8	3.7
Subtotal Int'l Passengers*	25.5%	25.6%	25.1%	24.4%	24.1%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Houston Airport System

\*Numbers may not total exactly due to rounding.

(1) Fiscal Year 2020 preliminary statistics.

**Houston Airport System  
Market Share Data  
(in thousands)**

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(1)</sup>
<b>Total Passengers-Hobby</b>					
Domestic					
Southwest	11,272	11,485	11,937	12,710	9,403
Delta and affiliates	429	447	436	436	282
American and affiliates	333	296	44	135	245
JetBlue	166	190	179	177	60
Frontier	-	-	-	-	-
All Others	8	5	286	170	4
Subtotal Domestic Passengers*	12,208	12,423	12,864	13,628	9,994
International					
Southwest	519	860	957	965	591
All Others	-	1	-	0.6	-
Subtotal Int'l Passengers*	519	860	957	966	591
Total (Domestic and International)	12,727	13,284	13,821	14,594	10,585
<b>Market Share-Hobby</b>					
Domestic					
Southwest	88.5%	86.5%	86.4%	87.1%	88.83%
Delta and affiliates	3.4	3.4	3.2	3.0	3.0
American and affiliates	2.6	2.2	.3	.9	2.0
JetBlue	1.3	1.4	1.3	1.2	1.0
Frontier	0.0	0.0	0.0	0.0	0.0
All Others	0.0	0.0	1.9	1.1	0.0
Subtotal Domestic Passengers*	95.9%	93.5%	93.1%	93.4%	94.42%
International					
Southwest	4.1%	6.5%	6.9%	6.6%	5.58%
All Others	0.0	0.0	0.0	0.0	0.0
Subtotal Int'l Passengers*	4.1%	6.5%	6.9%	6.6%	5.58%
Total	100.0%	100.0%	100.0%	100.0%	100.00%

Source: Houston Airport System

\*Numbers may not total exactly due to rounding.

(1) Fiscal Year 2020 preliminary statistics.

**Schedule 3: Total Aircraft Operations and Aircraft Landed Weight**

Schedule 3 shows the aircraft operations (take-offs and landings) and aircraft landed weight for the Houston Airport System for the most recent five fiscal years.

		<b>Aircraft Operations (in thousands)</b>				
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(1)</sup>
Aircraft Operations		787	760	735	752	484
Year-over-Year Change		-3.55%	-3.43%	-3.29%	2.31%	-35.6%
		<b>Aircraft Landed Weight (in million pounds)</b>				
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(1)</sup>
Aircraft Landed Weight		35,519	34,648	34,814	37,210	30,335
Year-over-Year Change		1.57%	-2.45%	0.48%	6.88%	-18.5%

(1) Fiscal Year 2020 preliminary statistics.

Source: Houston Airport System

## Schedule 4: Total System Cargo Activity

Schedule 4 shows cargo activity for the Houston Airport System for the most recent five fiscal years.

<b>Total System Cargo Activity (in metric tons)</b>					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(1)</sup>
Domestic Freight	195,644	209,343	231,670	270,965	303,153
International Freight	205,361	224,226	234,384	240,260	180,136
Mail	25,713	24,983	23,790	23,413	19,862
Total Cargo	426,718	458,552	489,844	534,638	503,151
Year-over-Year Change	-10.2%	7.5%	6.8%	9.1%	5.89%

Source: Houston Airport System

\*Numbers may not total exactly due to rounding.

(1) Fiscal Year 2020 preliminary statistics.

## HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION

### Sources of Revenues

The Houston Airport System generates Operating and Non-Operating Revenues from various sources:

#### *Landing Fees*

Landing fees for airlines that provide scheduled service at Intercontinental and Hobby are computed annually under residual cost-recovery formulas derived from various use and lease agreements and license agreements (see “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements”). Landing fees are also applied by ordinance to nonscheduled, commercial aircraft and non-signatory scheduled aircraft landings at both airports based upon maximum FAA-approved gross landed weights. The City also receives revenues from aviation fuel flowage fees (currently six cents per gallon) assessed on the delivery of fuel to certain aircraft in lieu of landing fees; however, at Intercontinental and Hobby, this revenue is netted against the airfield costs used to set the landing fees.

#### *Building and Ground Area Revenues*

Terminal space rentals paid by signatory airlines under use and lease agreements are computed annually under compensatory cost-recovery formulas derived from various use and lease agreements and license agreements. Ground rentals are charged by the City under long-term ground leases of land at Intercontinental, Hobby and Ellington, typically at market rates escalating periodically. The City leases various parcels of land to airlines, fixed base operators and various corporations for hangars, aircraft maintenance facilities, flight kitchens and cargo buildings, auto rental companies for their service facilities and storage lots, and to a variety of other entities for buildings and other permanent improvements. See “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements.”

#### *Parking, Concessions and Other Revenues*

Other than revenues from airline landing fees and terminal rentals, parking revenues from City-owned facilities are historically the largest single source of revenues of the Houston Airport System. Parking operations are managed and operated on behalf of the Houston Airport System by New South Parking. See “HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Other Significant Airport Agreements.” Parking rates are approved by the City Council; however, under a City ordinance, the Houston Airport System has the authority to increase parking rates, without further approval from City Council, up to specified amounts. Whereas the airline agreements generally allow for the Houston Airport System to set rates only to recover costs allocable to airline facilities, the Houston Airport System is generally able to set parking rates and concession and other business terms on a commercial basis. The Houston Airport System generates these nonairline revenues in order to (1) cover that portion of system operating and capital costs not paid by the airlines; (2) produce an annual surplus for deposit to the Airports Improvement Fund to meet current or anticipated needs of the Houston Airport System; and (3) comply with the Rate Covenant. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

### ***PFC Revenues***

The City is authorized by the FAA to impose and use PFC Revenues for certain Houston Airport System improvements. PFCs are being collected at the rate of \$4.50 (\$4.39 net of \$0.11 airline collections fee permitted by federal regulation) per eligible enplaned passenger at both Intercontinental and Hobby. In Fiscal Year 2019, PFC revenues received by the Houston Airport System indicated that approximately 86% of enplaned passengers were subject to the PFC. The City has authority to impose and use \$1,372,445,143 of PFCs collected at Intercontinental through January 1, 2028 and the authority to impose and use \$736,300,640 of PFCs collected at Hobby through September 1, 2038.

As further described under “CAPITAL IMPROVEMENT PROGRAM – PFC Revenues,” the City is authorized to use PFC revenues to pay debt service on bonds issued for certain capital improvement projects, reimburse the City for capital improvement projects funded from Houston Airport System resources, and provide pay-as-you-go funding for certain capital projects.

For purposes of the Master Ordinance, PFC Revenues are not Gross Revenues and are not pledged as security for any Airport Obligations, including the Series 2020 Bonds. See “SECURITY FOR THE SERIES 2020 BONDS.” However, as set forth in “– Schedule 5 – Selected Financial Information” below, the City has historically committed PFC Revenues to reduce Debt Service Requirements on the Subordinate Lien Bonds, and plans to continue to periodically commit PFC Revenues to reduce Debt Service Requirements on the Subordinate Lien Bonds.

For purposes of the Houston Airport System’s comprehensive annual financial statements, PFC Revenues are recognized as non-operating revenues. See APPENDIX A attached hereto. See also “INVESTMENT CONSIDERATIONS – Passenger Facility Charges” and “CAPITAL IMPROVEMENT PROGRAM – PFC Revenues” and “—Schedule A: PFC Collections.”

### **Selected Financial Information**

Schedule 5 sets forth, for the Fiscal Years indicated, (1) the Gross Revenues, Operation and Maintenance Expenses and Net Revenues (each computed as defined in the Ordinance) of the Houston Airport System, (2) the total Debt Service Requirement (computed as defined in the Ordinance) on then Outstanding Airport Obligations, which include all obligations payable from Net Revenues and (3) the coverage of Debt Service Requirement by Net Revenues. All amounts in “–Schedule 5: Selected Financial Information” for Fiscal Years 2015 through 2019 are derived from the audited financial statements of the Houston Airport System Fund, or from the supplementary information and the statistical section included in the City Controller’s Comprehensive Annual Financial Report of the City of Houston, Texas, for each respective Fiscal Year. The amounts for Fiscal Year 2020 are unaudited. The schedule should be read in conjunction with the complete audited financial statements of the City of Houston, Texas Airport System Fund Comprehensive Annual Financial Report and the notes thereto included as APPENDIX A. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

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## Schedule 5: Selected Financial Information

	(dollars in thousands)					
	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 (unaudited)
<b>Operating Revenues</b>						
Landing fees:						
Landing fees	\$89,426	\$82,703	\$84,036	\$91,258	\$83,318	\$92,179
Aviation fuel	1,521	1,527	1,350	1,679	1,554	1,249
Aircraft parking	2,628	2,640	2,660	2,842	2,895	3,343
Subtotal	<u>\$93,575</u>	<u>\$86,870</u>	<u>\$88,046</u>	<u>\$95,779</u>	<u>\$87,767</u>	<u>\$96,771</u>
Building and ground area revenues:						
Terminal space	\$173,392	\$191,321	\$196,162	\$195,198	\$185,943	\$195,040
Cargo building	2,506	2,484	2,448	2,390	2,391	2,378
Other rentals	6,252	6,808	6,453	6,460	6,454	9,361
Hangar rental	6,355	6,576	6,813	6,691	6,530	6,822
Ground rental	8,534	8,828	9,305	9,475	10,005	10,684
Subtotal	<u>\$197,039</u>	<u>\$216,018</u>	<u>\$221,181</u>	<u>\$220,214</u>	<u>\$211,323</u>	<u>\$224,285</u>
Parking, concession and other revenues:						
Retail concessions	\$ 41,855	\$ 35,216	\$ 39,999	\$ 41,245	\$ 41,521	\$ 32,146
Auto parking	97,515	101,650	99,752	103,961	110,136	81,173
Auto rental	31,991	30,737	28,735	28,767	28,949	23,400
Ground transportation	9,323	10,083	10,402	11,062	12,645	10,135
Other operating revenue	4,984	8,324	5,926	9,836	6,123	5,951
Subtotal	<u>\$185,668</u>	<u>\$186,009</u>	<u>\$184,814</u>	<u>\$194,871</u>	<u>\$199,374</u>	<u>\$152,805</u>
<b>Total operating revenue</b>	<u>\$476,282</u>	<u>\$488,897</u>	<u>\$494,041</u>	<u>\$510,864</u>	<u>\$498,464</u>	<u>\$473,860</u>
<b>Nonoperating revenues<sup>(1)</sup></b>						
Interest on investments <sup>(1)</sup>	\$ 6,014	\$6,986	\$ 9,306	\$13,348	\$19,681	\$19,503
Other revenues - revenue fund	7,526	(52)	7,177	(1,805)	46	141
Subtotal	<u>\$13,540</u>	<u>\$6,934</u>	<u>\$16,483</u>	<u>\$11,543</u>	<u>\$19,727</u>	<u>\$19,644</u>
<b>Total gross revenues</b>	<u>\$489,822</u>	<u>\$495,831</u>	<u>\$510,524</u>	<u>\$522,407</u>	<u>\$518,191</u>	<u>\$493,504</u>
<b>Operation and maintenance expenses<sup>(2)</sup></b>						
Personnel and other current expenses	\$283,451	\$309,455	\$249,382	\$326,321	\$326,757	\$330,862
Interest on pension bonds and note <sup>(3)</sup>	107	107	107	107	106	110
Other interest	-	5,153	5,018	461	-	-
Less: Eligible Renewal & Replacement	-	-	-	-	-	(5,515)
<b>Total operation and maintenance expenses</b>	<u>\$283,557</u>	<u>\$314,715</u>	<u>\$254,506</u>	<u>\$326,889</u>	<u>\$326,863</u>	<u>\$325,457</u>
<b>Net revenue</b>	<u>\$206,264</u>	<u>\$181,117</u>	<u>\$256,018</u>	<u>\$195,518</u>	<u>\$191,328</u>	<u>\$168,048</u>
<b>Total Debt Service Requirements</b>	\$163,319	\$163,904	\$175,023	\$174,456	\$176,312	\$185,239
PFC revenue available for debt service	(38,054)	(42,320)	(54,673)	(50,642)	(60,646)	(54,040)
Grant revenue available for debt service	(16,399)	(13,888)	-	-	-	(14,169)
<b>Net Debt Service Requirement<sup>(4)</sup></b>	<u>\$108,866</u>	<u>\$107,696</u>	<u>\$120,350</u>	<u>\$123,814</u>	<u>\$115,666</u>	<u>\$117,030</u>
<b>Coverage of debt service</b>	1.89	1.68	2.13 <sup>(5)</sup>	1.58	1.65	1.44

\* Totals may not add up due to rounding.

- (1) The figures shown have been adjusted for miscellaneous revenues not defined as Gross Revenues or Net Revenues in the Ordinance. Excludes interest revenue earned in restricted bond funds and PFC Revenues.
- (2) Does not include depreciation expenses.
- (3) Represents a portion of the pension debt issued in 2005 allocable to the Houston Airport System. No revenues of the Houston Airport System are pledged to such debt.
- (4) Does not include debt service for which interest was capitalized from bond proceeds. Interest earned in reserve funds and used for debt service reduces the Debt Service Requirement. See definition of "Debt Service Requirements" in APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.
- (5) Operating and maintenance expense for debt service coverage calculations decreased by \$60.2 million between Fiscal Year 2016 and Fiscal Year 2017, primarily due to a \$67.4 million decrease in pension expense associated with pension reform enacted in 2017. Without the effects of pension reform, it is estimated that debt service coverage would have been 1.63 in Fiscal Year 2017.

Source: Houston Airport System

## Schedule 6: Summary of Certain Fees and Charges

Schedule 6 shows the budgeted rates and charges for Fiscal Year 2020 and Fiscal Year 2021 for both Intercontinental and Hobby. These rates and charges are established according to the terms of the use and lease agreements for each airport and are subject to annual fiscal year-end adjustments once actual airport-related expenses are finalized. See “– Sources of Revenues” above and “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

	Intercontinental		Hobby	
	FY 2020	FY 2021	FY 2020	FY 2021
Landing Fee Rates <sup>(1)</sup>	\$ 2.533	\$ 4.560	\$ 2.049	\$ 5.143
Terminal Space Rentals <sup>(2)</sup>	24.54-70.22	20.71-52.92	58.04-70.94	41.89-45.86
Apron <sup>(2)</sup>	2.683-2.589	2.802-2.854	2.002-2.040	1.852-1.890
Aircraft Parking (per day)	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00
Cargo (per day)	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00
Parking Rates (maximum per day)				
Economy				
(Ecopark) Uncovered	5.54	5.54	n/a	n/a
(Ecopark) Covered	7.39	7.39	n/a	n/a
(Ecopark2) Covered	6.47	6.47	n/a	n/a
(Ecopark2)	n/a	n/a	9.24	9.24
Structured	24.00	24.00	24.00	24.00
Sure Park	26.00	26.00	n/a	n/a
Valet	28.00	28.00	28.00	28.00

Source: Houston Airport System

(1) Per 1,000 pounds of landed weight.

(2) Range per square foot.

Shown below are average airline payments per enplaned passenger for the most recent five fiscal years. This average does not include payments by United for special facility bond debt service or terminal operations and maintenance in net-leased terminals, nor is it reflective of concession revenues retained by United in these terminals. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

### Houston Airport System Total Cost Per Enplanement (\$ per enplanement)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020 <sup>(1)</sup>	FY 2021 <sup>(2)(3)</sup>
Intercontinental	10.56	10.62	11.08	11.39	10.16	15.81	18.73
Hobby	6.43	7.15	6.15	6.40	6.63	9.23	13.93

(1) Houston Airport System estimate. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Forward-Looking Statements and Projections.”

(2) Houston Airport System projection. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Forward-Looking Statements and Projections.”

(3) Airline costs at Hobby were reduced from \$49 million in the Fiscal Year 2020 budget to \$37 million (-24%) in the Fiscal Year 2021 budget and reduced at Intercontinental from \$236 million in the Fiscal Year 2020 budget to \$153 million (-35%) in the Fiscal Year 2021 budget.

Source: Houston Airport System

## DEBT SERVICE REQUIREMENTS OF HOUSTON AIRPORT SYSTEM OBLIGATIONS

### Schedule 7: Houston Airport System Debt Service Requirements Schedule

Schedule 7 sets forth the Debt Service Requirements on all Outstanding Subordinate Lien Bonds, assuming scheduled mandatory redemption of any term bonds. This schedule excludes the Senior Lien Notes. There currently are no Senior Lien Bonds Outstanding.

12 Months Ending	Subordinate Lien Bonds			
	Existing Subordinate Lien Debt Service	Less: Refunded Subordinate Lien Debt Service <sup>(1)</sup>	Plus: Series 2020 Bonds Debt Service	Adjusted Subordinate Lien Debt Service
7/1/2021	\$ 182,844,821	\$ 43,310,464	\$ 14,740,600	\$ 154,274,956
7/1/2022	180,409,674	79,213,250	47,041,896	148,238,320
7/1/2023	179,915,056	88,298,738	93,283,199	184,899,518
7/1/2024	180,056,227	88,291,163	93,235,959	185,001,023
7/1/2025	179,848,556	88,731,550	93,653,529	184,770,536
7/1/2026	182,427,956	91,035,450	92,899,972	184,292,478
7/1/2027	180,257,344	88,635,838	92,450,878	184,072,384
7/1/2028	180,273,241	88,363,735	92,026,174	183,935,680
7/1/2029	185,374,317	48,627,811	53,849,249	190,595,755
7/1/2030	185,668,181	48,550,675	53,774,081	190,891,587
7/1/2031	183,407,256	121,625,750	129,141,485	190,922,991
7/1/2032	187,375,506	77,925,750	82,274,612	191,724,368
7/1/2033	42,536,500	-	9,813,000	52,349,500
7/1/2034	42,535,250	-	9,815,750	52,351,000
7/1/2035	42,532,500	-	9,815,000	52,347,500
7/1/2036	42,539,750	-	9,814,200	52,353,950
7/1/2037	42,532,750	-	9,814,000	52,346,750
7/1/2038	42,533,250	-	9,814,000	52,347,250
7/1/2039	42,541,750	-	9,813,800	52,355,550
7/1/2040	13,503,500	-	9,813,000	23,316,500
7/1/2041	13,501,250	-	9,816,200	23,317,450
7/1/2042	3,821,000	-	9,812,800	13,633,800
7/1/2043	3,820,250	-	9,812,600	13,632,850
7/1/2044	3,827,750	-	9,815,000	13,642,750
7/1/2045	3,822,750	-	9,814,400	13,637,150
7/1/2046	3,825,500	-	9,815,400	13,640,900
7/1/2047	3,820,250	-	9,812,400	13,632,650
7/1/2048	3,822,000	-	-	3,822,000
Totals*	\$2,539,374,135	\$952,610,174	\$1,085,583,185	\$2,672,347,148

(1) Variable rate bonds reflect original certified rates.

\*Numbers may not total exactly due to rounding.

Source: Houston Airport System



### Schedule 8: Houston Airport System Outstanding Debt

Schedule 8 summarizes Houston Airport System debt outstanding as of June 30, 2020, including the Series 2020 Bonds and excludes the Refunded Bonds and Refunded Notes. Special Facilities Revenue Bonds listed below are not secured by any revenues of the City or the Houston Airport System and are solely the obligation of third parties.

	Outstanding Principal Amount (dollars in thousands)
Senior Lien Revenue Bonds, fixed rate	\$ -
Senior Lien Notes <sup>(1)</sup>	-
Subordinate Lien Revenue Bonds, fixed rate <sup>(2)</sup>	2,012,125
Subordinate Lien Revenue Bonds, variable rate <sup>(3)</sup>	-
Inferior Lien Obligations <sup>(4)</sup>	-
Pension Obligation Bonds <sup>(5)</sup>	<u>2,006</u>
Total Outstanding Principal	<u>\$2,014,131</u>
Special Facilities Revenue Bonds <sup>(6)</sup>	\$ 924,460

(1) Adjusted to exclude the Refunded Notes. The City has authorized issuance of up to \$350 million of Airport System Senior Lien Notes, Series A and B as commercial paper, \$150,973,000 of which is being refunded by the Series 2020A Bonds. As of September 1, 2020, \$150,973,000 of Senior Lien Notes was Outstanding. See "INTRODUCTION – Senior Lien Obligations and Inferior Lien Bonds."

(2) Adjusted to include the Series 2020 Bonds and exclude the 2020C Refunded Bonds.

(3) Adjusted to exclude the 2020B Refunded Bonds.

(4) See "INTRODUCTION – Senior Lien Obligations and Inferior Lien Bonds."

(5) Represents the Houston Airport System's allocation of the City's pension obligation bonds issued in 2005, although not direct obligations of the Houston Airport System. In December 2017, the City issued \$1.005 billion of pension obligation bonds; however, the Houston Airport System has no further financial obligation with respect to these bonds.

(6) Represents the dollar amount of Special Facilities Bonds that the City has issued on behalf of third parties, the repayment of which is solely the obligation of such third parties. THESE SPECIAL FACILITIES BONDS ARE SECURED SOLELY BY LEASE PAYMENTS OF THIRD PARTIES, AND NO REVENUES OF THE HOUSTON AIRPORT SYSTEM ARE PLEDGED TO PAY SUCH BONDS. Approximately \$74.4 million of the bonds outstanding were issued to support a consolidated rental car facility and the remaining bonds were issued to support certain Continental (now United) airport projects. See "HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS – Airport Use and Lease Agreements and Special Facilities Lease Agreements" for a more detailed description of these bonds.

Source: Houston Airport System

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## Schedule 8A: Cash and Liquidity

Schedule 8A shows the cash position of the Houston Airport System and a calculation of days of cash on hand for the most recent five fiscal years. A portion of the Houston Airport System cash is restricted to certain uses and some of the cash is unrestricted. The Ordinance requires the Houston Airport System to set aside two months of operation and maintenance reserves in the Operation and Maintenance Reserve Fund. The Houston Airport System’s policy has been to reserve greater than the minimum two-month requirement to accommodate fluctuations in revenues and enplanements. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Cash and Liquidity.”

	<b>Houston Airport System Cash and Investments (dollars in thousands)</b>					
	<u>FY 2015</u>	<u>FY 2016</u>	<u>FY 2017</u>	<u>FY 2018</u>	<u>FY 2019</u>	<u>FY 2020 (Unaudited)</u>
Restricted and Unrestricted Airport System Cash and Investments	\$457,396	511,384	\$480,251	\$508,633	\$485,410	\$449,913
Days of Restricted and Unrestricted Cash on Hand	589 <sup>(1)</sup>	595	689 <sup>(2)</sup>	568	545	470

Source: Houston Airport System.

- (1) In Fiscal Year 2015, the Houston Airport System made appropriations for new multi-year contracts related to Intercontinental’s Terminal Redevelopment Program, resulting in the reduction of unrestricted cash on hand.
- (2) If not for the decrease in pension expense in Fiscal Year 2017 associated with pension reform, Houston Airport System management estimates that Days of Unrestricted Cash on Hand would have been 557 for Fiscal Year 2017.

## HOUSTON AIRPORT SYSTEM SIGNIFICANT CONTRACTUAL AGREEMENTS

### Airport Use and Lease Agreements and Special Facilities Lease Agreements

#### *General*

At both Intercontinental and Hobby, the vast majority of landing fees and terminal rentals are paid by the airlines pursuant to use and lease agreements and/or special facilities leases. Those agreements generally require the airlines to pay landing fees, terminal building rentals and certain other charges to enable the Houston Airport System to recover costs allocable to facilities occupied by the airlines. These costs include, among others, operation and maintenance expenses, amortization charges associated with the Houston Airport System’s investment in airport capital improvements and interest on the Houston Airport System’s investment in land. Airlines that do not operate under use and lease agreements operate either under agreements on a month-to-month basis or under City ordinance.

While the Houston Airport System maintains different use agreements for Intercontinental, each terminal at Intercontinental, and Hobby, airline rentals and use fees are generally calculated using the same “compensatory” cost allocation and rate-making principles. Under these principles, the Houston Airport System creates cost centers for each terminal or major facility (e.g., Terminals A, B, C, D and E; the Central Federal Inspections Services (“FIS”) Facility; the Skyway; and the Airfield at Intercontinental; and the Central Terminal, West Terminal, and Airfield at Hobby) and calculates a rate base requirement as the total of all allocable direct, indirect and system (e.g., the Subway and the central utility plant) operating and capital costs of the facility. Capital costs are calculated as the level annual amortization charge allocable to each investment. Terminal costs are further allocated between airline, nonairline, and apron areas, with terminal building and apron rental rates set to recover the rate base requirement, and the Houston Airport System bears risk for costs allocable to vacant space. Costs associated with nonairline (e.g., public and concession) areas of the terminals are the responsibility of the Houston Airport System and are recovered through concession revenues (including parking, rental car and ground transportation revenues) and other eligible non-airline revenues. Landing fee rates are calculated on a cost-center residual basis to recover in full the costs of the airfield area, net of certain nonairline cost center revenues (principally general aviation fuel flowage fees).

At Intercontinental, United leases certain terminals (Terminals B, C and E) under long-term “net lease” agreement provisions by which United leases in full airline and nonairline premises so that there is no risk to the Houston Airport System for vacant space, and capital investment is generally the responsibility of United. The amount

of space that is leased by United in Terminals B, C and E comprises 53% of the total usable terminal space at Intercontinental, which is approximately 4.6 million square feet. In consideration of this mitigated risk, the Houston Airport System confers upon United the right to control, and retain revenues generated by, terminal concessions, such as food and beverage, gifts and news.

The following sections summarize the major provisions of the Houston Airport System's use and lease agreements, special facilities leases and license agreements.

***Intercontinental Terminal A Airlines Use and Lease Agreement***

The Terminal A Use and Lease Agreement expired on June 30, 2005, and is currently being held over on a month-to-month basis with Air Canada, American, Delta, Spirit and United. In addition to allowing for the lease of preferential terminal building space, the agreement provides for the use of certain premises such as holdroom and apron on a common-use basis, with equivalent per-use charges in lieu of rentals.

***Intercontinental Terminal B Improvement Projects and Special Facilities Lease Agreement***

In November 2011, the Houston Airport System and Continental (now United) entered into a Second Amended and Restated Special Facilities Lease (the "Terminal B Special Facilities Lease") with a term of thirty years, subject to certain early termination and extension provisions, to provide for the redevelopment of Terminal B in three phases (the "Terminal B Improvement Projects"). Pursuant to the Terminal B Special Facilities Lease, United leases all airline premises in Terminal B and, as facilities are redeveloped, all airline and nonairline premises in the terminal under "net lease" provisions. Also pursuant to the Terminal B Special Facilities Lease, the Houston Airport System leases to United certain special facilities located in Terminal C that were financed with proceeds of previously issued special facilities bonds.

The Terminal B Improvement Projects will be accomplished in phases. In the first phase, completed in 2013, United built a new Terminal B South Concourse for regional jet aircraft. In the second phase, completed in May 2017, United built Terminal C North, a new mainline concourse between the original north concourses of Terminals B and C. Under the third and final phase, United has the option to construct two new international-capable Terminal B North Concourses for both mainline and regional jet aircraft along with a Terminal B FIS facility and the renovation and reconstruction of the existing Terminal B central lobby and baggage claim areas. The redevelopment, with the exception of the projects to be funded by the City, as detailed below, is to be undertaken by United at its sole expense, with the City agreeing to issue additional special facilities bonds on behalf of United secured by the Terminal B Special Facilities Lease.

To support the Terminal B Improvement Projects, the Houston Airport System has agreed to undertake certain capital projects to be completed concurrently with United's capital projects at Terminal B. The Houston Airport System's capital projects include ramp and apron replacement and roadway, signage, the Subway, utility, environmental and fuel system relocation or improvements. The first phase of the Houston Airport System's capital program for Terminal B cost approximately \$53 million. The second phase cost approximately \$91.5 million. It is anticipated that the third phase will cost approximately \$176.5 million. The Houston Airport System's capital program for Terminal B was and will be financed largely with AIF cash balances, PFC Revenues, grants, and airport revenue bond proceeds. See "CAPITAL IMPROVEMENT PROGRAM – CIP Projects" herein. See also "IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Management's Response" for a discussion of changes to the Houston Airport System's CIP funding policy in response to the Pandemic.

As security for the Houston Airport System Special Facilities Revenue Bonds (Continental Airlines, Inc. Terminal Improvement Projects), Series 2011, and the Houston Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Terminal Improvement Projects), Series 2015B-1, and the Houston Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal Improvement Projects), Series 2020B-2, the Terminal B Special Facilities Lease obligates United to pay rent, directly to the trustee, equal to the debt service on such special facilities bonds. In addition, following substantial completion of each phase or segment of the Terminal B Improvement Projects, United will pay the Houston Airport System rentals calculated under "net lease" provisions.

### ***Intercontinental Terminal C Use and Lease Agreements***

United's Airport Use and Lease Agreement, as it relates to Terminal C, was amended in 2015 and expires on December 31, 2037. The Terminal C Use and Lease Agreement gives United the preferential right to use all of the apron area and exclusive right to use of all of the holdrooms and other airline space in Terminal C for the duration of the lease term.

The amended Airport Use and Lease Agreement converted Terminal C to a net lease similar to Terminal E's, in which United is responsible for all maintenance, janitorial and all-around upkeep. In consideration of the net lease, in which United retains all revenues from inside concessions.

In calculating airline fees, rentals and any other charges at Intercontinental, the total costs of all support facilities such as the Subway and the chilled and hot water plant are allocated among the various areas that benefit from such facilities, including airline areas of the terminal buildings. In addition, the Houston Airport System charges apron fees that are calculated to recover costs allocable to the aprons. Finally, landing fees are calculated according to a formula through which the airlines are required to pay their pro-rata share of all costs allocable to the airfield cost center after first deducting airfield revenues derived from general aviation (principally fuel flowage fees, if any).

### ***Intercontinental Terminal D International Facilities Agreement***

Foreign-flag airlines, United and other airlines providing international service at Terminal D, share the Central FIS Facility with Terminal E. They operate under the terms of the International Facilities Agreement, which was recently amended to expire December 31, 2021, but is cancellable by either the Houston Airport System or the signatory airlines with 30 days' notice. Use fee rates are calculated for Terminal D sub-cost centers by function (e.g., arrivals, departure, and ticketing and baggage make-up), with costs allocated using compensatory rate-making principles.

### ***Intercontinental Terminal E Lease and Special Facilities Lease Agreement***

The term of the Terminal E Lease and Special Facilities Lease Agreement (the "Terminal E Special Facilities Lease") relating to the central ticketing facility, Terminal E baggage system improvements, Terminal C-East garage, ATO facility, Terminal E apron area and fuel systems and ancillary facilities, commenced August 29, 2001 and is scheduled to terminate on January 31, 2030. United may extend the term for an additional 5-year period, subject to certain conditions. United net leased the facilities on an exclusive basis, with the exception of the Terminal E apron area and fuel systems, which are leased on a preferential basis.

As security for the Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal E Project), Series 2014 and Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal E Project), Series 2020A, which refinanced the special facilities bonds originally issued in 2001 to finance Terminal E, the Terminal E Special Facilities Lease obligates United to pay rent, directly to the trustee, equal to debt service on such special facilities bonds. In addition, United must pay the Houston Airport System ground rentals for the special facility areas and "city charges" for the portions of the facilities financed by the Houston Airport System as well as certain allocated costs relating to capital project amortization, maintenance, and operations costs, replenishment of the renewal and extension fund for system costs, and airport and departmental administrative costs. In consideration of United's net leasing of the entire Terminal E and central ticketing facility (including the public areas), United is entitled to the revenues from all "inside concessions" at Terminal E, such as revenues from concession agreements for food and beverage, gift/news, telephone and advertising.

### ***Other United Lease Agreements at Intercontinental***

On February 20, 2018, the City issued its Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Technical Operations Center Project), Series 2018 (AMT) (the "2018 UTOC Bonds") to finance a new technical operations center and provide certain improvements to related facilities at Intercontinental ("UTOC") and, in connection with the 2018 UTOC Bonds, the City and United entered into a special facilities lease, whereby United agreed, among other things, to pay debt service on the 2018 UTOC Bonds. The term of the special facilities lease relating to UTOC expires in 2053.

The construction and improvement of certain of the United facilities at Intercontinental were partially financed by the Airport System Special Facilities Revenue Bonds, Series 1997C and Series 1998C (together, the “1998 Bonds”), which were originally issued in the amounts of \$44,600,000 and \$25,675,000, respectively, and subsequently refunded by the Airport System Special Facilities Revenue Refunding Bonds, Series 2015C (the “2015C Bonds”), which 2015C Bonds were refunded by the Airport System Special Facilities Revenue Refunding Bonds, Series 2020C (the “United 2020C Bonds”). Simultaneously with the issuance of the 2018 UTOC Bonds on February 20, 2018, the City issued its Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Airport Improvement Projects), Series 2018C (AMT) (the “2018C Bonds”) to finance the improvement, renovation, expansion and repair of certain special facilities of United at Intercontinental, including improvements to an existing aircraft maintenance hangar facility, construction of an aircraft shops facility, and renovation of a maintenance and parts storage facility. In connection with the issuance of the 2018C Bonds, the City and United entered into an amendment to a Special Facilities Lease that was originally entered into by the parties in connection with the issuance of the 1998 Bonds related to non-terminal facilities used by United at Intercontinental. The 2018C Bonds are secured on a parity with the United 2020C Bonds, neither of which are secured by revenues of the Houston Airport System. United has a continuing obligation to pay debt service on such bonds that may become due and payable after expiration of the special facilities lease term, which extends until the end of 2027.

United leases approximately 4,300 parking spaces principally near the Ecopark economy parking lot at Intercontinental. The spaces are primarily for employee use. In conjunction with the MOA related to the UTOC project mentioned above, the lease was extended until August 31, 2027.

### ***Hobby Use and Lease Agreements***

The use and lease agreements for the airlines operating at Hobby are similar in form and substance to the agreements at Intercontinental, but with certain differences in rate-making methodology. The agreements do not divide cost centers into “airline” and “nonairline,” as is the practice at Intercontinental but, like at Intercontinental, the airlines have financial responsibility only for the premises they lease. Under the Hobby use and lease agreements, landing fees are calculated using the same formula as is used at Intercontinental. The Hobby agreements also include a cost containment provision with respect to the Terminal Building, the Central Concourse and associated Apron and Airfield cost centers. This provision uses the Fiscal Year 2012 airline cost per enplanement as a base but allows increases based on the Consumer Price Index for the Houston area both annually and cumulatively, with no adjustments if the actual cost per enplanement for ensuing fiscal years does not exceed the adjusted rate. If the adjusted rate were calculated to exceed the calculated containment cost per enplanement, the Houston Airport System must reduce the allocation of costs to airline cost centers so as not to exceed the adjusted rate. The lease also provides for an Inside Concession Revenue-sharing program for those airlines signing a 25-year lease term. Currently, only Southwest has done so. The revenue-sharing program calls for inside concession revenue (food and beverage, retail) to be shared at the average net inside concession revenue rate per enplaned passenger for each fiscal year in which there is incremental enplanement growth over the base of Fiscal Year 2012, up to a maximum of \$4 million annually.

In February 2013, the Houston Airport System entered into a new agreement with Southwest, which expires on June 30, 2040. Delta and American both originally entered into five-year agreements in 2015 that automatically renewed in 2020 for another five-year term as neither airline elected to exercise their option cancel the lease after its initial five-year term. In October 2015, international operations began at Hobby.

In December 2016, the City and Southwest entered into an MOA regarding a maintenance hangar development project. The City agreed to lease almost 44 acres at Hobby exclusively to Southwest for the project. The project was completed in January 2020 and included both Southwest project components and City project components. Southwest expended, at its own cost, \$125 million dollars to design and construct the project. The complex is approximately 240,000 square feet and can hold up to six 737 narrowbody aircraft. The City’s enabling projects are estimated to cost approximately \$14 million dollars.

### **Other Significant Airport Agreements**

#### ***Rental Car Facilities at Intercontinental***

The consolidated rental car facility at Intercontinental was financed in March 2001 with proceeds of the City’s Airport System Special Facilities Taxable Revenue Bonds, Series 2001 (Consolidated Rental Car Facility

Project), issued in the principal amount of \$130,250,000. A portion of these special facility bonds were refinanced with the issuance of the City’s Airport System Special Facilities Taxable Revenue Refunding Bonds (Consolidated Rental Car Facility Project), Series 2014. These special facility bonds are secured by and payable from a separate customer facility charge (“CFC”) assessed on rental car customers at Intercontinental, which, as of June 30, 2020, is \$4 per transaction day. Under the terms of the Master Special Facilities Lease, the rental car companies are responsible for all operation and maintenance costs associated with the facility and the associated busing operation. Such lease is scheduled to expire on June 30, 2027.

The Houston Airport System has concession agreements with eight rental car operators at Intercontinental (which represent 11 brands) that expire June 30, 2027. At Hobby, there are nine operators, four of which lease facilities from the Houston Airport System on month-to-month leases. The concession agreements with the operators at Hobby go to a month-to-month basis on January 1, 2021.

### ***Concessions, Cargo and Service Agreements***

Shown below is a summary of other significant non-airline agreements for the Houston Airport System.

#### **Houston Airport System Significant Non-Airline Agreements**

<u>Vendor</u>	<u>Expiration Date</u>	<u>Extension or Termination Options</u>	<u>Service Provided</u>	<u>Airport</u>
JC Decaux	February 28, 2024; July 31, 2024	N/A	Advertising	Intercontinental; Hobby
International Shoppes Shekinah Group IAH, LLC	August 18, 2029		Duty Free	Intercontinental
Paradies-HOU 2014, LLC	December 31, 2025	N/A	News, gift and specialty	Hobby
WDFG	December 31, 2025	N/A	News, gift and specialty	Hobby
Host International, Inc	December 31, 2025	N/A	Food	Intercontinental
WDFG North America, LLC	December 31, 2025	N/A	News, gift and specialty	Intercontinental
Paradies-IAH 2014, LLC	December 31, 2025	N/A	News, gift and specialty	Intercontinental
SSP America Texas, Inc	December 31, 2025	N/A	Food	Intercontinental
Latrelle’s Galley, L.P.	December 31, 2025	N/A	Food	Intercontinental
Host International, Inc.	December 31, 2025	N/A	Food	Intercontinental
Houston Airport Hotel Owner’s, L.P.	October 31, 2053	N/A	Marriott	Intercontinental
4 Families of Houston	Month to month	N/A	Food	Hobby
Federal Express	May 31, 2022	1 five-year extension option	Freight, Mail	Intercontinental
UPS	December 31, 2022	2 ten-year optional extensions	Freight, Mail	Intercontinental
Aero Houston Central	December 31, 2024	N/A	Central Cargo	Intercontinental
Aero Houston East, LLC	February 25, 2043	Option to terminate after 30 years	East Cargo	Intercontinental
Aero Houston East II, L.P.	February 28, 2043	Option to terminate after 30 years	East Cargo	Intercontinental
Trammel Crow Company IAH International Air Cargo II, L.P	August 31, 2049	Option to terminate after 30 years	Perishables Cargo	Intercontinental
Prologis	February 28, 2043	Option to terminate after 30 years	East Cargo, Warehouse	Intercontinental
New South Parking –Texas	June 30, 2021	N/A	Parking management	Intercontinental; Hobby

Source: Houston Airport System

## **THE AIRLINE INDUSTRY FINANCIAL INFORMATION**

Certain of the certificated major domestic airlines (or their respective parent corporations) are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended, and thus must file reports and other information with the U.S. Securities and Exchange Commission (the “Commission”). Certain information, including financial information, as of particular dates, concerning the certificated major domestic airlines (or their respective parent corporations) is disclosed in such reports and statements filed with the Commission. Such reports and statements can be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, and at the Commission’s regional offices, including the Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, IL 60661-2511 and 5670 Wilshire Boulevard, 11th Floor, Los Angeles, California 90036. Copies of such reports and statements can be obtained from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Washington, D.C. 20549, at prescribed rates. The Commission also maintains a website at <http://www.sec.gov> containing reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The Commission undertakes no responsibility for and makes no representations (and the City, the City’s Co-Financial Advisors and the Underwriters disclaim any responsibility) as to the accuracy or completeness of the content of such material contained on the world wide web as described in the preceding sentence, including but not limited to, updates of such information or links to other world wide websites accessed through the aforementioned website. In addition, all major and certain other airlines are required to file periodic reports of financial and operating statistics with the United States Department of Transportation. Such reports can be inspected in the Office of Airline Statistics, Research and Special Programs Administration, United States Department of Transportation, 400 Seventh Street, S.W., Washington, D.C. 20590, and copies of such reports can be obtained from the U.S. Department of Transportation at prescribed rates.

Airlines owned by foreign governments or foreign corporations operating airlines (other than foreign airlines that have American Depository Receipts registered on a national exchange) are not required to file information with the Commission. Airlines owned by foreign governments, or foreign corporations operating airlines, file limited information only with the U.S. Department of Transportation.

## **INVESTMENT CONSIDERATIONS**

### **COVID-19**

See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM” above for risks associated with the Series 2020 Bonds resulting from the COVID-19 pandemic.

### **Economic and Political Conditions**

Historically, U.S. airline passenger traffic has correlated closely with the state of the U.S. economy and levels of real discretionary income. Recessions in the U.S. economy in 2001, 2008-2009 and 2020 and associated high unemployment reduced discretionary income and coincided with reduced airline travel in those years. With the globalization of business and the increased importance of international trade and tourism, the U.S. economy is more closely tied to worldwide economic, political and social conditions. As a result, international economics, trade balances, currency exchange rates, political relationships and hostilities all influence passenger traffic at major U.S. airports. Sustained future increases in passenger traffic at the Houston Airport System airports depend on stable international conditions as well as national and global economic growth.

### **Oil and Gas Industry**

The Houston metropolitan area has the world’s largest concentration of petro-chemical manufacturing, so the regional economy has been particularly susceptible to adverse conditions in the oil and gas industry. Concerns related to the Pandemic, among other factors, have led to recent declines in crude oil prices in the U.S., at times to the lowest levels in three decades. These price declines have led to reduced revenues, declines in capital and operating expenditures, business failures and layoffs of workers in the oil and gas industry. The continuation of adverse conditions in the oil and gas industry and their spillover effects on other industries in the Houston region could adversely affect the Houston region’s economy and the demand for air travel at Intercontinental and Hobby. See “THE HOUSTON AIRPORT SYSTEM – Airport Service Region – *Top 10 Greater Houston Private Employers*” and “INVESTMENT CONSIDERATIONS – Economic and Political Conditions.”

## **Financial Condition of the Airlines**

The ability of the Houston Airport System to generate revenues depends, in part, upon the financial health of the aviation industry in general. The economic condition of the aviation industry is volatile and periodically the industry undergoes significant changes, including mergers, acquisitions, bankruptcies and closures. Further, the aviation industry is sensitive to a variety of factors, including (i) the cost and availability of financing, labor, fuel, aircraft and insurance, (ii) regional, national and international economic conditions, (iii) international trade, (iv) currency values, (v) competitive considerations, including the effects of airline ticket pricing, (vi) traffic and airport capacity constraints of the Houston Airport System and competing airports, (vii) governmental regulation, including security regulations and taxes imposed on airlines and passengers, and maintenance and environmental requirements, (viii) passenger demand for air travel and (ix) disruption caused by airline accidents, criminal incidents, acts of war or terrorism, such as the events of September 11, 2001, and public health emergencies, such as the Pandemic. The aviation industry is also vulnerable to strikes and other union activities. The number of passengers at the Houston Airport System airports depends partly on the profitability of the U.S. airline industry and the associated ability of the industry and individual airlines, particularly United and Southwest, to make the necessary investments to provide service.

### ***Recent History of Airlines***

Airlines generally have faced volatile economic cycles and, after September 11, 2001 and during the economic recessions of 2008-2009 and 2020, suffered significant losses. In 2010 through 2013, the U.S. passenger airline industry as a whole recorded net income of approximately \$18 billion, notwithstanding sustained high fuel prices, by controlling capacity and nonfuel expenses, increasing airfares, recording high load factors and increasing ancillary revenues. Between 2009 and 2013, U.S. airlines collectively increased domestic seat-mile capacity by an average of 1.0% per year.

In 2014, the U.S. passenger airline industry reported net income of \$9 billion, assisted by reduced fuel prices in the second half of the year (as discussed in the later section, “– *Availability and Cost of Aviation Fuel*”). In 2015, the industry achieved record net income of \$27 billion as fuel prices decreased further, demand remained strong, and capacity control allowed average fares and ancillary charges to remain high. Strong industry profitability continued in 2016 through 2019. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.” Sustained industry profitability depends on, among other factors, economic growth to support airline travel demand, continued capacity control to enable increased airfares, and stable fuel prices.

### ***Airline Service and Routes***

Intercontinental and Hobby accommodate travel demand to and from the Houston region and serve as connecting hubs. The number of origin and destination passengers at the two airports depends on the intrinsic attractiveness of the region as a business and leisure destination, the propensity of its residents to travel, and airline fares and service. The number of connecting passengers, on the other hand, depends entirely on airline fares and service provided at the airports.

The large 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 drastically reduced at many former connecting hub airports, including those serving St. Louis (American, 2003-2005), Dallas-Fort Worth (Delta, 2005), Pittsburgh (US Airways, 2006-2008), Las Vegas (US Airways, 2007-2010), Cincinnati (Delta 2009-2011), Memphis (Delta, 2011-2013) and Cleveland (United, 2014).

Intercontinental serves as a primary connecting hub and international gateway for United and Hobby serves as a connecting airport and Latin American gateway for Southwest. As a result, much of the connecting passenger traffic at the two airports results from the route networks and flight schedules of United and, to a lesser extent, Southwest, rather than the economy of the Houston region. If United reduced connecting service at Intercontinental, or Southwest reduced connecting service at Hobby, such service would not necessarily be replaced by other airlines.



### ***Airline Competition and Airfares***

Airline fares have an important effect on passenger demand, particularly for relatively short trips, for which automobile and other surface travel modes are potential alternatives, and for price-sensitive discretionary travel. The price elasticity of demand for airline travel increases in weak economic conditions when the disposable income of potential airline travelers is reduced. Airfares are influenced by airline capacity and yield management, passenger demand, airline market presence, labor, fuel and other airline operating costs, taxes, fees and other charges assessed by governmental and airport agencies, and competitive factors. Future passenger numbers, both nationwide and at the Houston Airport System airports, will depend, in part, on the level of airfares.

Prior to 2010, a variety of factors reduced industry airfares and resulted in decreased airline profits. Beginning in 2010, as airline travel demand increased and seat capacity contracted because of industry consolidation, yields increased to 16.7 cents per passenger-mile in 2016. Beginning in 2006, charges were introduced by most airlines for services such as checked baggage, preferred seating, in-flight meals, and entertainment, thereby increasing the effective price of airline travel more than these yield figures indicate.

### ***Availability and Cost of Aviation Fuel***

Airline earnings are significantly affected by changes in the price of aviation fuel. According to the Air Transport Association, fuel, along with labor costs, is one of the largest cost components of airline operations and continues to be an important and uncertain determinant of an air carrier's operating economics. There has been no shortage of aviation fuel since the "fuel crisis" of 1974, but any increase in fuel prices causes an increase in airline operating costs. Fuel prices continue to be susceptible to, among other factors, political unrest in various parts of the world (particularly in the oil-producing nations in the Middle East and North Africa), Organization of Petroleum Exporting Countries policies, the rapid growth of economies such as China and India, the levels of inventory carried by industries, the amounts of reserves maintained by governments, disruptions to production and refining facilities and weather.

### ***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. 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, have made business customers more amenable to communications substitutes such as tele- and video-conferencing.

### ***Uncertainties of the Airline Industry***

The Houston Airport System's ability to generate Gross Revenues from its operations depends on many factors, many of which are not subject to the Houston Airport System's control. Revenues may be affected by the ability of the airlines, individually and collectively, to meet their respective obligations under the airlines' use and lease agreements.

The financial strength and stability of airlines serving the Houston Airport System are key determinants of future airline traffic. In addition, individual airline decisions regarding levels of service, particularly hubbing activity, at the Houston Airport System will affect total enplanements. No assurance can be given as to the levels of aviation activity at the Houston Airport System. There is no assurance that the Houston Airport System, despite a demonstrated level of airline service and operations, will continue to maintain such levels in the future.

See “THE AIRLINE INDUSTRY FINANCIAL INFORMATION” and “INVESTMENT CONSIDERATIONS – Financial Condition of the Airlines.”

The continued presence of the airlines serving the Houston Airport System, and the levels at which that service will be provided, are a function of a variety of factors. Future airline traffic of the Houston Airport System will be affected by, among other things, the growth or decline in the population and the economy of the service region of the Houston Airport System and by national and international economic conditions, acts of war and terrorism, federal regulatory actions, airline service, air fare levels and the operation of the air traffic control system.

### ***Airline Concentration; Effect of Airline Industry Consolidation***

On October 1, 2010, Continental became a wholly-owned subsidiary of United Continental Holdings, Inc. (“UCH”) as a result of the merger of a subsidiary of UCH with and into Continental. (United also operated as a wholly-owned subsidiary of UCH.) UCH assumed all of Continental’s obligations. The combined airline received a single operating certificate from the FAA on November 30, 2011. In early March 2015, the two airlines achieved full integration and began operating under the name “United Airlines.”

On May 2, 2011, Southwest announced that it had closed its purchase of all of the outstanding common stock of AirTran Holdings, Inc., the former parent company of AirTran Airways (“AirTran”). Southwest and AirTran received approval for a single operating certificate from the FAA on March 1, 2015. Southwest has been the largest passenger airline at Hobby over the last several years. Other mergers include Delta Air Lines and Northwest Airlines in 2008, American Airlines and US Airways in 2013, and Alaska Airlines and Virgin America in 2016.

Further airline consolidation remains possible. Although the Houston Airport System believes that merger activity has had little impact on the respective combined airlines’ market shares at Intercontinental or Hobby, future mergers or alliances among airlines operating at the Houston Airport System’s facilities may result in fewer flights or decreases in gate utilization as airlines reduce capacity. Such decreases could result in reduced Net Revenues, reduced PFC Revenue collections and increased costs for the other airlines using the Houston Airport System. However, historically, when airlines have reduced or ceased operations at the Houston Airport System, other airlines have absorbed the traffic with no significant adverse impact on the Houston Airport System revenues.

United and Southwest account for a significant portion of the Houston Airport System’s operating revenues. For more information, see Note 10 of the Notes to the Financial Statements as set forth in APPENDIX A. If either airline were to significantly reduce service it could have a material impact on revenues, including concession revenues and PFC Revenue collections, and on the resulting cost per enplanement charged at each airport.

## **Passenger Facility Charges**

### ***General***

Pursuant to 49 U.S.C. §40117 and the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (the “PFC Act”), the FAA has approved the City’s application to require the airlines to collect and remit to the City a \$4.50 PFC on each enplaning revenue passenger at Intercontinental and Hobby, as further discussed in “HOUSTON AIRPORT SYSTEM FINANCIAL INFORMATION –Sources of Revenues – *PFC Revenues.*”

The PFC Act provides that PFC Revenues collected by the airlines constitute a trust fund held for the beneficial interest of the eligible agency (i.e., the City) imposing the PFCs, except for any handling fee or retention of interest collected on unremitted proceeds. In addition, federal regulations require airlines to account for PFC Revenue collections separately and to disclose the existence and amount of funds regarded as trust funds for financial statements. However, the airlines are permitted to commingle PFC Revenue collections with other revenues and are also entitled to retain interest earned on PFC Revenue collections until such collections are remitted. In the event of a bankruptcy, the PFC Act, as amended in December 2003, provides that (1) PFCs are and remain trust funds, (2) the airline in bankruptcy may not grant to any third party any security or other interest in PFC Revenues and (3) the airline in bankruptcy must segregate in a separate account PFC Revenues equal to its average monthly PFC liability as well as post-petition actual PFC Revenues. Despite these enhanced statutory protections, it is unclear whether the City would be able to recover the full amount of PFC trust funds collected or accrued by an airline in the event of its liquidation or cessation of business. The City also cannot predict whether an airline operating at Intercontinental or

Hobby that files for bankruptcy would have properly accounted for PFC Revenue owed to the City or whether the bankruptcy estate would have sufficient moneys to pay the City in full for PFC Revenue owed by such airline. Although the City expects to pay a portion of the Series 2020 Bond debt service from PFC Revenue, PFC Revenue is not pledged to the payment of the Series 2020 Bonds. See “SECURITY FOR THE SERIES 2020 BONDS – General.” For a discussion of the treatment of PFC Revenues under the Ordinance, see APPENDIX B-1 – GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE.

### ***FAA Reauthorization***

The FAA Reauthorization Act of 2018, which extended FAA’s federal funding and authorities through Fiscal Year 2023, represented the first significant multi-year reauthorization since the FAA Modernization and Reform Act of 2012, and the first five-year reauthorization since 1982. The signing of the long-term bill frees up the FAA from the uncertainty caused by short-term extensions and instead authorizes the reliable, predictable funding the FAA needs to invest in critical priorities. However, the failure of Congress to reauthorize the FAA’s operating authority beyond Fiscal Year 2023, or adverse changes in the conditions placed on such authority, could have an adverse impact on Houston Airport System operations over the long run because grants awarded under the FAA’s Airport Improvement Program have been a significant source of financing for the Houston Airport System.

### ***Availability of PFCs***

The Houston Airport System currently uses PFC collections to pay a portion of its debt service and to fund certain pay-as-you-go projects. The Houston Airport System budgeted \$58.3 million of PFCs to pay subordinate lien debt service in Fiscal Year 2020 and budgeted \$56.5 million to pay subordinate lien debt service in Fiscal Year 2021. The collection of PFCs is subject to several risks. The amount of PFCs received by the Houston Airport System depends on the actual number of eligible passenger enplanements at Intercontinental and Hobby. As eligible passenger enplanements decline, PFC collections will also decline. Further, the PFC authorizations for Intercontinental and Hobby expire in January 2028 and September 2038, respectively. Finally, the Houston Airport System’s authority to impose PFCs could be terminated if it violates Department of Transportation regulations regarding their use. A shortfall in PFC collections would require the Houston Airport System to pay these debt service costs from existing cash balances or from Net Revenues, or to seek approval to increase PFC rates at one or both airports, and could impact on the ability to comply with the Rate Covenant (see “COVENANTS AND TERMS OF THE ORDINANCE – Rate Covenant”). The PFC rate is currently \$4.50 per enplaned passenger at both Intercontinental and Hobby. See “CAPITAL IMPROVEMENT PROGRAM – Schedule A: PFC Collections,” “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Impact on PFC Revenues.”

### **Airport Security and Safety**

Concerns about the safety of airline travel and the effectiveness of security and health safety precautions influence passenger travel behavior and airline travel demand. Anxieties about the safety of flying and the inconveniences and delays associated with security and health screening procedures could lead to both the avoidance of travel and the switch 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 (the “TSA”), more effective dissemination of information about threats, more intensive screening of passengers and baggage, and deployment of new screening technologies. The TSA also has introduced “pre-check” service to expedite the screening of passengers who have submitted to background checks. Concerns about the safety of air travel were heightened in 2016 by gun and bomb attacks at Brussels Airport and at Istanbul Ataturk Airport.

Historically, airline travel demand has recovered after temporary declines stemming from terrorist attacks or threats, hijackings, aircraft crashes, public health and safety concerns, and international hostilities. If precautions by government agencies, airlines and airport operators maintain confidence in the safety of commercial aviation without imposing unacceptable inconveniences for airline travelers, it can be expected that future demand for airline travel at the Houston Airport System airports will depend primarily on economic, not safety or security, factors.

In addition, the COVID-19 Pandemic has caused a substantial decline in passenger traffic at both Intercontinental and Hobby. The current reduced level of passenger traffic is expected to continue. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Passenger Statistics.”

### **Cybersecurity Initiatives of the City**

The Houston Airport System relies on computer technology for its operations, and faces cybersecurity threats including, but not limited to, hacking, phishing, viruses, malware, digital theft, and other attacks on its digital networks and systems. As a recipient and provider of personal, private, or sensitive information, the Houston Airport System may be the target of cybersecurity incidents that could adversely affect the Houston Airport System’s operations.

The federal government regulates various aspects of airport operations and the FAA and TSA both impose various regulations and security directives that affect the design, policies and procedures of the information technology and physical access security of Houston Airport System. Houston Airport System Information Technology department has yearly initiatives that minimize the risk to airport operations such as upgrades to servers, computers, network devices, security related hardware and software, security assessments, audits, reviews, and policies and procedures. Major investments have also been made to increase the posture to Houston Airport System cybersecurity-related initiatives in order to minimize risk. In addition, the Houston Airport System is committed to replacing the current electronic badging system with the next generation access and identity system that will greatly reduce and minimize the threats of a physical compromise to airport security access.

The City has taken several steps to enhance and protect information systems and information of the City. In addition, to help protect the City against claims and expenses due to a cybersecurity incident, the City maintains \$30,000,000 of cyber insurance. The City implemented Executive Order (EO) 1-44 (2013) and Executive Order 1-48 (2014) (the “Executive Orders”) respectively authorizing the Chief Information Officer (CIO) to manage city-wide IT risk, to develop a city-wide information security program. The CIO designated a Chief Information Security Officer (CISO) responsible for carrying out the CIO’s information security responsibilities. Specific objectives of the Executive Orders include: (i) protecting all City information and information systems in a manner that is commensurate with the security classification level, sensitivity, value, and critical nature of information; (ii) protecting information from unauthorized access, disclosure, destruction, disruption, or modification while the information is being collected, processed, transmitted, stored, or disseminated; (iii) managing all information technology that is acquired, developed, or used in support of City programs, projects, and department requirements by use of a process that covers the complete system lifecycle; (iv) managing all information systems in a cost-effective manner, guided by the application of sound risk management processes that ensure an appropriate level of integrity, confidentiality, and availability of information in each phase of the system lifecycle; (v) conducting periodic audits of all City information systems that process, store, or transmit City data; (vi) investigating information security incidents for incident management, forensic investigations, and reports; and (vii) ensuring all basic information security policy requirements, audits, and forensic investigations are implemented across all City departments.

Among other initiatives, the CISO is in the process of implementing a comprehensive, 4-year information security master plan covering Fiscal Years 2018 through 2021. The plan is designed to identify, protect, detect, respond and recover from cyber events and incidents from nation state actors, organized criminals, hacktivist groups and insider threats. The City is in year two of the master plan and several initiatives have been completed. Certain aspects of the plan are funded and are expected to be implemented in the next several Fiscal Years.

In addition to direct risks to the Houston Airport System’s digital systems, FAA digital systems and individual airline systems are subject to the same kinds of risks as the Houston Airport System, and attacks on those systems could substantially affect Houston Airport System operations and revenues.

### **Capacity of National Air Traffic Control and Airport Systems**

Demands on the national air traffic control system have, in the past, caused delays and operational restrictions affecting airline schedules and passenger traffic. The FAA is gradually implementing its Next Generation Air Transportation System (NextGen) air traffic management programs to modernize and automate the guidance and communications equipment of the air traffic control system and enhance the use of airspace and runways through improved air navigation aids and procedures.

## **Operational Issues Related to 737 MAX Aircraft**

On March 13, 2019, the FAA ordered the temporary grounding of the Boeing 737 MAX aircraft. It is unclear when the FAA will lift this grounding. At the time of the grounding, approximately 13 flights per day were scheduled at Intercontinental and 12 flights per day were scheduled at Hobby. However, the grounding did not have a material adverse effect on the Houston Airport System as the primary operators of the aircraft at Intercontinental and Hobby adjusted their flight schedules and replaced the 737 MAX flights with other aircraft types.

## **Hurricane Activity and Weather Events Affecting Houston**

Downtown Houston is located approximately 50 miles north of the Gulf of Mexico. The Gulf region is prone to seasonal hurricane activity; major hurricanes or other dangerous storms may develop. A hurricane of great severity could significantly damage Houston Airport System properties. The Houston Airport System maintains hurricane insurance jointly and severally with the City and its other enterprise departments, but the policy covers only part of the total property value of the Houston Airport System. Deductibles and any costs in excess of insured amounts or reimbursements received from FEMA would be borne by the City or the airlines.

The City experienced a substantial natural disaster on August 23-27, 2017, when up to 50 inches of rain in the Houston area from Hurricane Harvey caused flooding in portions of the City. Intercontinental closed to commercial traffic for two days but the airlines had resumed normal operating capacity by September 5, 2017. Operations at Hobby were stopped for three days and airlines resumed normal operations by September 7, 2017. Enplanements for August and September decreased by approximately 616,000, or 3.1%, when compared to the same period for the previous year.

The Houston Airport System sustained water damage to various buildings and components of the airfields at all three airports. The estimate of the total damage to facilities owned by the Houston Airport System is approximately \$4 million. Shortly after Hurricane Harvey, the Houston Airport System established a “Disaster Recovery O&M Fund” in its accounts to serve as an appropriation source for disaster-related expenses pending insurance payments and reimbursement by FEMA.

## **Unmanned Aerial Vehicles**

With the proliferation of inexpensive, commercially available, unmanned aerial vehicles (“UAVs”), or drones, the threat that unauthorized and unsafe UAV operations near airports could adversely affect the safety or security of U.S. airports and arriving or departing aircraft has increased significantly in recent years. Recent incursions of airport airspace by UAVs have disrupted airport operations by causing flights to be halted or diverted. London’s Gatwick Airport was closed for 27 hours, impacting some 140,000 passengers and causing roughly 1,000 flights to be delayed or canceled between December 19 and 21, 2018 due to drone incursions. An unauthorized UAV incursion at Intercontinental or Hobby could result in the temporary delay or cancellation of flights to or from such airport as well as harm the Houston Airport System’s brand, reputation and its relationships with its customers, airlines and government partners. Although UAVs are regulated by the FAA and federal law prohibits the Houston Airport System from disrupting UAV operations or undertaking UAV countermeasures, the Houston Airport System is working closely with the FAA to develop measures to prevent unauthorized UAV activity from adversely affecting the Houston Airport System. There can be no assurance, however, that in the future, unauthorized UAV activity will not adversely affect operations at Intercontinental or Hobby.

## **General Factors Affecting Air Traffic at the Houston Airport System**

There are numerous factors that affect air traffic generally and, more specifically, air traffic at the Houston Airport System. Demand for air travel is influenced by factors such as population, levels of disposable income, the nature, level and concentration of industrial and commercial activity in the service area and the price of air travel. The price of air travel is, in turn, affected by the number of airlines serving a particular airport and a particular destination, the financial condition, cost structure and hubbing strategies of the airlines serving an airport, the willingness of competing airlines to enter into an airport market, the cost of operating at an airport, the price of fuel and any operating constraints (due to capacity, environmental concerns or other related factors) limiting the frequency or timing of airport traffic within the national system or at a particular airport.

## **Cost and Completion Schedule of Houston Airport System Capital Improvement Program**

The costs and completion timeframe of capital projects included in the Houston Airport System’s CIP are subject to a number of uncertainties. The ability of the Houston Airport System to complete the CIP could be adversely affected by various factors including: (i) estimating errors, (ii) design and engineering errors, (iii) changes to the scope of the projects, (iv) delays in contract awards, (v) material, and/or labor shortages, (vi) unforeseen site conditions, (vii) adverse weather conditions, (viii) contractor defaults, (ix) labor disputes, (x) unanticipated levels of inflation, (xi) environmental issues, including environmental approvals that the Houston Airport System has not obtained at this time, (xii) additional security improvements and associated costs mandated by the federal government and (xiii) lack of adequate funding, including inability to access the capital markets or loss of grants or PFC Revenues.

A delay in the completion of certain projects under the CIP could delay the collection of revenues for such projects, increase project costs, or cause the rescheduling of other projects. There can be no assurance that the cost of construction of the Fiscal Year 2021-2025 CIP projects will not exceed the currently estimated dollar amount or that the completion of the projects will not be delayed beyond the currently projected completion dates. Any schedule delays or cost increases could result in the need to issue additional Airport Obligations and may result in increased costs per enplaned passenger to the airlines, which could place the Houston Airport System at a competitive disadvantage with other airports. Further, changes in the mix of the projects that comprise the Houston Airport System’s CIP could negatively impact the long-term revenue base of the Houston Airport System. This could occur if there were a substantial shift to the capital projects that the Houston Airport System is required to fund out of non-airline revenues versus those that become part of the airline rate base and for which the Houston Airport System receives airline revenues through landing fees and terminal rentals. In such case, the Houston Airport System would seek to alter its rate-making methodology or find additional revenue sources. See “CAPITAL IMPROVEMENT PROGRAM” and “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM.”

### **Airport System Capital Markets Access**

Airport operators such as the Houston Airport System have also historically required access to third-party capital, primarily through the municipal bond market, to finance significant portions of their capital needs and to effectively manage their cost per enplanement or debt coverage ratios. If the capital markets were to become inaccessible by the Houston Airport System or interest rates were to rise, it could significantly impact the Houston Airport System’s ability to meet its prospective coverage ratios or to meet its future spending needs or to achieve a competitive cost per enplanement.

### **Parking and Concession Revenues**

City-owned parking facilities historically are the Houston Airport System’s largest single source of non-airline revenues. The City’s parking facilities compete with several off-site private parking operators that provide free shuttle service to their customers at both Intercontinental and Hobby. Accordingly, competitive supply and demand constraints have affected the City’s ability to significantly increase parking revenues, and may continue to affect revenues, at its on-site economy parking facilities. Additionally, the range of approved parking rates must be established by City Council, which could limit the Houston Airport System’s ability to increase rates for either its structured parking or economy parking facilities.

Concessions are the second largest source of non-airline revenues for the Houston Airport System. Under amendments to the leases governing United’s use and occupancy of Terminals B and C at Intercontinental, concession revenues earned from operations in the B-South and C-North concourses now accrue largely to the benefit of United. In the past, the City collected a percentage of revenues from the concession operators in those concourses, however, as part of the aforementioned amendments, United now provides facility operations and maintenance functions at no cost to the City in exchange for the concession revenues earned in those facilities. See “IMPACT OF COVID-19 PANDEMIC ON THE HOUSTON AIRPORT SYSTEM – Impact on Travel to and Revenues of Houston Airport System – *Airport System Revenues.*”

### **Effect of Airline Bankruptcies**

Prior bankruptcies by airlines using the Houston Airport System have resulted in reductions of service levels by particular airlines, even in cases where such airlines continued to operate in bankruptcy. Bankruptcies, liquidations

or major restructurings of other airlines could occur. The bankruptcy of an airline with significant operations at the Houston Airport System, such as United or Southwest, could have a material adverse effect on operations at the Houston Airport System, revenues and the cost to the other airlines operating at the Houston Airport System. Regardless of any specific adverse determinations in an airline bankruptcy proceeding, the fact of an airline bankruptcy proceeding could have an adverse effect on the liquidity and value of the Series 2020 Bonds.

In the event of bankruptcy proceedings involving one or more of the airlines operating at the Houston Airport System, the debtor or its bankruptcy trustee must determine within a time period determined by the court whether to assume or reject the applicable airline's use and lease agreement or other lease agreements. If assumed, 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 an airline would give the City an unsecured claim for damages, the amount of which in the case of a lease is limited by the Bankruptcy Code.

## **THE CITY AND CITY FINANCIAL INFORMATION**

### **Governmental Structure**

The City has a mayor-council form of government in which the Mayor and the sixteen-member City Council serve as the legislative body. Eleven council members are elected by district and five council members are elected at-large. The present term of office for all elected officials expires in January 2024. Litigation is pending relating to the qualifications to hold office of one of the Council District B candidates in the election for terms of office beginning in January 2020. Pursuant to Article 16, Section 17 of the Texas Constitution and Article V, Section 5 of the City of Houston Charter, Council Member Davis, whose eligibility to serve on City Council has expired, may continue to perform the duties of his office until this litigation is finally resolved and his successor is qualified and elected. On November 3, 2015, voters approved an amendment to the City Charter ("Term Limits Amendment") that changed the number of terms of elective office to no more than two terms in the same office and limits the length for all terms of elective office to four years, beginning in January 2016. This Term Limits Amendment (codified in Article V, Sec. 6a, City Charter) also provided for a transition whereby those City elected officials elected to their first terms in office in the November 2013 election were able to serve two more four-year terms (for a potential total of 10 years in office).

The Mayor is the City's chief executive officer. The Mayor exercises administrative control over the City's government; presides over City Council meetings; establishes the City Council agenda; and appoints the heads of the various departments of the City, subject to confirmation by the City Council. The Mayor also is responsible for preparing and submitting the City's annual budget proposals to the City Council for adoption.

The City Controller is the City's chief financial officer. The Office of the City Controller superintends, supervises, manages and conducts the fiscal affairs of the City; maintains the books of accounts; prepares financial statements; conducts the sales of City obligations; certifies the availability of funds before the City incurs any financial obligation; and, along with the Mayor, countersigns all warrants, contracts or orders for payment of any money by the City.

### **Home-Rule Charter**

The City operates under a home-rule charter pursuant to the Texas Constitution. The City Charter may be amended not more than once every two years at an election held for that purpose, which may be called by the City Council or upon petition of 20,000 of the City's registered voters. The last City Charter amendments were adopted on November 6, 2018. See "-- Governmental Structure." In addition, the City Charter allows the City's voters to exercise the powers of initiative and referendum. To compel enactment of an ordinance by initiative, a petition signed by voters equal in number to at least 15% of the largest total number of votes cast for Mayor in any general election in the preceding three (3) years must be submitted to the City. Thereafter, the City Council may enact the ordinance or call an election on the question of its adoption. To compel a referendum on an ordinance, a petition signed by voters equal in number to at least 10% of the largest total number of votes cast for Mayor in any general election in the preceding three (3) years must be submitted to the City. Thereafter, the City Council may repeal the ordinance that is the subject of the referendum petition or call an election on the question of its repeal. See "-- City Charter Tax and Revenue Propositions."

## City Interest Rate Swap Policy

The City currently has no outstanding Swaps (as defined below) with respect to any Outstanding Airport Obligations.

The City follows a master swap policy, as amended from time to time (the “Swap Policy”), to provide guidance for the City in its use of swaps, caps, floors, collars, options and other derivative financial products (collectively, “Swaps”) in conjunction with the City’s management of its assets and liabilities. The Swap Policy describes the circumstances and methods by which Swaps will be used, the guidelines to be employed when Swaps are used, and the City official responsible for carrying out these policies. The City may enter into Swaps as authorized by the City Council and approved by the Attorney General of the State of Texas in connection with the issuance or payment of certain debt obligations, before, concurrently with, or after the actual issuance of the debt.

As a general rule, the City will enter into Swap transactions only with counterparties whose obligations are rated in the double-A category or better from at least one nationally recognized rating agency. In addition, if a counterparty’s credit rating is downgraded below the double-A rating category, the City may require that its exposure to the counterparty be collateralized or may exercise its right to terminate the Swap transaction prior to its scheduled termination date. In order to limit the City’s counterparty risk, the City will seek to avoid excessive concentration of exposure to a single counterparty or guarantor.

The Swap Policy provides that the City may choose counterparties for entering into Swap contracts on either a negotiated or competitive basis. To provide safeguards on negotiated transactions, the Swap Policy provides that the City should generally secure outside professional advice to assist in the process of structuring, documenting and pricing the transaction, and to verify that a fair price was obtained. In any negotiated transaction, the counterparty will be required to disclose all payments to third parties (including lobbyists, consultants and attorneys) who had any involvement in assisting the counterparty in doing business with the City.

The City will track and regularly report on the financial implications of its Swaps. A quarterly report will be prepared for the City Council including: (i) a summary of key terms of the contracts, including notional amounts, interest rates, maturities and methods of procurement, including any changes to Swap contracts since the last reporting period; (ii) the mark-to-market value (termination value) of Swaps measured by the economic cost or benefit of terminating outstanding contracts at specified intervals; (iii) the amount of the City’s exposure to each different counterparty, as measured by aggregate mark-to-market values, netted for offsetting transactions; (iv) the credit ratings of each counterparty (or guarantor, if applicable) and any changes in credit ratings since the last reporting period; and (v) the posting of collateral as a result of Swap contract requirements. In addition, the City will perform such monitoring and reporting as is required by the rating agencies or for compliance with GASB requirements.

## Financial Policies

The City operates under financial policies (the “Financial Policies”) that have been adopted by City Council. The Financial Policies were initially approved in 2003, amended and restated in 2014, and amended in 2015 to include provisions regarding pay-as-you-go funding. Under the Financial Policies, the Mayor is required to review the Financial Policies at least once every two years. On May 16, 2018, the City Council revised and updated the Financial Policies in connection with the required review. The Financial Policies are currently under review.

Under the heading of Operating Budget Policies – Revenues and Expenditures, the Financial Policies state that the City will adopt a budget annually in which current revenues and other sources will be sufficient to support current expenditures. All retirement and employee benefit systems will be financed in a manner to fully and systematically fund liabilities (with the City making all necessary payments in compliance with contractual obligations and statutory requirements and in a manner that results in full amortization of liabilities over a closed 30-year period). See the sections captioned “– Health Care Benefits for Retired Employees,” “– Employee Pension Funds” and Schedules 9, 9A, 9B and 9C for more detailed information relating to the funding of the City’s OPEB and Pension Systems.

Each Enterprise Fund maintains revenues that support the full (direct and indirect) cost of the service provided. A review of all fees and rates will be conducted at least every five years except for impact fees, which will be reviewed at least every ten years, to determine the extent to which the full costs of associated services are being



recovered by revenues. Fees may be adjusted in the interim period by ordinance based on an analysis conducted whenever there have been significant changes in the method, level or cost of service delivery. The General Fund unassigned fund balance will be maintained to provide for temporary financing of unforeseen needs of an emergency, disaster and economic instability. The Financial Policies also provide that the level of the General Fund unassigned fund balance will be a minimum of 7.5% of General Fund expenditures, less debt service and transfers for pay-as-you-go capital expenditures. To the extent that the General Fund unassigned fund balance exceeds such amount, the excess funds will be available for appropriation by City Council for non-recurring expenditures.

Under the heading Special Revenue Fund Reserve Policy, the Financial Policies state that the proposed and adopted operating budgets for each year must include the budgets of all special revenue funds that are restricted or committed to specified purposes other than debt service or capital projects. Each special revenue fund is required to have an appropriate methodology for determining minimum and maximum cash reserves. The Financial Policies also state that any fiscal year-end fund balance that exceeds the established maximum cash reserve of a special revenue fund may be transferred to the General Fund, subject to City Council approval.

Under the heading of Debt Management Policies, the Financial Policies provide that any capital project financed through the issuance of bonds be financed for a period not to exceed the average expected life of the assets. Average (weighted) general obligation bond maturities will be maintained at or below 12 years. The Financial Policies also provide that annual contributions to the Debt Service Fund from the General Fund not exceed 20% of total General Fund revenues, excluding state and federal grants, until Fiscal Year 2019. Beginning in Fiscal Year 2019 and in each subsequent fiscal year, the maximum annual contribution to the Debt Service Fund from the General Fund will be reduced by 0.5% annually until it reaches 12% of General Fund revenues (excluding state and federal grants), at which point the maximum will be held constant at 12%.

The City's Financial Policies require that an annual audit be performed by an independent public accounting firm in accordance with generally accepted accounting principles. The June 30, 2019 City Controller's audited Comprehensive Annual Financial Report of the City and additional financial information are available for public inspection, or copies may be obtained by written request, to the extent permitted by law, addressed to the Office of the City Controller.

Additionally, the Financial Policies require the Finance Department to annually prepare a five-year General Fund forecast that includes identification of requirements for achieving a "structural balanced budget" in the upcoming fiscal year and the subsequent fiscal year, including a list of options for eliminating any funding shortfalls preventing achievement of a structural balanced budget. If a structural balanced budget was adopted by the City Council, it is expected that the level of expenditure reductions would be materially and significantly higher than currently anticipated.

### **City Investment Policy**

The City maintains an investment strategy that emphasizes, in order of priority, safety, liquidity and return on investment, as embodied in its investment policy (the "Investment Policy"). The City does not invest in inverse floaters, or interest-only or principal-only mortgage-backed securities. The Investment Policy provides, among other things, that (1) the Investment Manager (as defined in the Investment Policy) shall submit quarterly investment reports to City Council and (2) the Investment Policy shall be reviewed annually by City Council. On December 4, 2019, the City Council approved and readopted the Investment Policy, which was amended to permit the investment in commercial paper with a stated maturity of up to 365 days as permitted by new legislation. The Investment Policy aims to further protect City assets by identifying investment objectives, addressing the issues of investment risks versus rewards, and providing the framework for the establishment of controls, limitations and responsibilities of City employees in the performance of their fiduciary responsibilities.

Fitch Ratings, Inc. has assigned a "AAA" credit quality rating to the City's General Investment Portfolio. The ratings reflect the view of Fitch Ratings, Inc., from whom an explanation of the significance of such ratings may be obtained.

The Ordinance provides that all interest and income derived from the deposit and investment of amounts held in all Funds will be transferred or credited monthly to the Revenue Fund and shall constitute Gross Revenues of the Houston Airport System (unless specifically excluded from the definition of Gross Revenues), except as follows: (1)

all interest and income derived from deposits and investments credited to the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Reserve Fund and the Operation and Maintenance Reserve Fund will remain in such funds to the extent necessary to accumulate the Reserve Fund Requirements or other required balance therein; and (2) all interest and income derived from deposits and investments held in any construction fund, including amounts held therein as capitalized interest, created by any ordinance authorizing the issuance of Airport Obligations will remain in such construction fund for disposition in the manner provided in the applicable ordinance. Notwithstanding anything to the contrary contained in the Ordinance, any interest and income derived from deposits and investments of any amounts credited to any fund or account may be paid to the federal government if in the opinion of nationally recognized bond counsel such payment is required in order to prevent interest on any Airport Obligations from being includable within the gross income of the owners thereof for federal income tax purposes.

### **Health Care Benefits for Retired Employees**

The City provides certain health care benefits for its retired employees, their spouses and survivors. Employees on long-term disability and their spouses can also qualify for retiree health care benefits. Currently, substantially all of the City's employees who qualify for pension benefits while working for the City will become eligible for such benefits.

The City provides five (5) Medicare plans with five (5) different vendors and has made these plans mandatory for all retirees over age 65 who are eligible for Medicare. The medical plans are supported by contributions from the City and subscribers. In addition to the medical plan and in an effort to mitigate costs and maximize benefits to the City and Medicare eligible retirees, the City offers Medicare Advantage plans from several insurance providers. Effective January 1, 2015, the City awarded a three-year contract with two (2) one-year renewal options to Texan Plus, HealthSpring, Aetna Steerage (PPO Plan), Kelsey (HMO Plan) and United Healthcare. As of January 1, 2020, the City extended the current contracts for an additional year to December 31, 2020. These Medicare Advantage Plans provide retirees with alternative managed healthcare plans. The Medicare Advantage Plans continue to be fully insured products and offer retirees the choice of several different plans. Effective May 1, 2011, the City requires all Medicare-eligible retirees to enroll in a Medicare Advantage Plan.

### ***Bargaining with Other Municipal Employees***

Chapter 146 of the Texas Local Government Code ("Chapter 146"), extends to municipal employees of the City, other than department heads, firefighters and police officers, the right to appoint bargaining agents to "meet and confer" with representatives of the City or any agency, board, commission or political subdivision that is required to establish wages, salaries, rates of pay, hours, working conditions or other terms and conditions of employment regarding such issues. Chapter 146 prohibits municipal employees from engaging in strikes and specifically prohibits the bargaining agent and the City from entering into agreements regarding pension-related matters governed by Article 6243g, Vernon's Texas Civil Statutes, or a successor statute (now Article 6243h, Vernon's Texas Civil Statutes). See "– Employee Pension Funds." However, any agreement affecting the salaries of municipal employees will likely have a negative effect on the City's pension liabilities.

Pursuant to the provisions of Chapter 146, the City recognized the Houston Organization of Public Employees ("HOPE") as the exclusive bargaining agent for all covered employees, which generally consist of municipal employees, but not elected officials, directors or classified employees. On June 25, 2018, City Council enacted an ordinance approving a new "meet and confer" agreement between HOPE and the City that will expire on June 30, 2021 (the "2018 HOPE Agreement"). Pursuant to the 2018 HOPE Agreement, an "across-the-board" three percent pay increase occurred on July 1, 2018, a two percent increase occurred on July 1, 2019, and a one percent increase occurred on July 1, 2020.

### **Employee Pension Funds**

*Prospective investors are advised that any projections or forecasts in the section below, including projections of the amount of the Unfunded Actuarially Accrued Liability ("UAAL") and other calculations of unfunded pension liability and the amounts of actuarially calculated contributions by the City, constitute forward-looking information that reflects the judgment of the City, the boards of the Pension Systems (as defined below) and their respective actuaries as to the funding required to pay future benefits to retirees. Such forward looking information is based upon a variety of assumptions concerning future events and circumstances. Future actuarial studies may differ significantly*

from current estimates due to factors such as: retirements, terminations, deaths, disabilities, salary growth and investment returns, changes in contributions or investment portfolios, changes in actuarial or accounting standards, and changes in plan provisions, the Pension Statutes (as defined below) or applicable laws. See “– Pension Reform Legislation” below. The assumptions underlying the projections are material to the development of the projections, and changes in one or more of the assumptions may produce substantially different results. In addition to these projections, the City’s financial statements as set forth at <http://www.houstontx.gov/controller/cafr.html> also report Net Pension Liability as required by GASB 68. The Net Pension Liability, as reported in the financial statements, is materially higher than the UAAL reported in the various actuarial reports of the Pension Systems and has materially changed the City’s financial statements relating to the Pension Systems beginning in Fiscal Year 2015. Such differences reflect, in part, the different methods of valuation employed by accountants and actuaries. Prospective investors are strongly encouraged to review the entirety of Note 10 to the City’s Financial Statements at <http://www.houstontx.gov/controller/cafr.html> for additional information.

### ***Statutory Authority, Governance and Management***

Texas statutes authorize three separate pension systems (collectively, the “Pension Systems”) for full-time firefighters (“HFRRF” or the “Firefighter Fund”), police (“HPOPS” or the “Police System”), and municipal employees (“HMEPS” or the “Municipal System”). Detailed information regarding the funding of each Pension System is discussed under “– Municipal System,” “– Police System,” and “– Firefighter Fund” below and in Note 10 to the City’s Financial Statements. Each Pension System is a defined benefits plan, which guarantees retiree benefits based on years of service and salary. The City bears the primary financial risk of such plans. Therefore, the City must fund the Pension Systems to pay a retiree’s defined benefit regardless of why the Pension System is underfunded.

The Texas Legislature adopted the Pension Reform Legislation to enact reforms and substantive changes to the funding and benefit structure of the Pension Systems. The Pension Reform Legislation was effective July 1, 2017 (the “Reform Effective Date”), the first day of Fiscal Year 2018, and is the culmination of an effort to reform the Pension Systems to control costs, reduce the unfunded liability and better manage future pension costs and liabilities. The risk-sharing corridor implemented in the Pension Reform Legislation provides the City with more budget certainty by establishing minimum and maximum City contribution rates and mandates management of unfunded liabilities by the City and the Pension Systems. Under the Pension Reform Legislation, the City will pay off the unfunded liability (the “Legacy Liability”) over a fixed maximum 30-year amortization period ending in 2047. The Legacy Liability is calculated using a standard actuarial cost methodology, based on the market value of each Pension System’s assets as of July 1, 2016, after giving effect to the Pension Reform Legislation and delivery of the 2017 pension obligation bonds issued on December 22, 2017 in the aggregate principal amount of \$1,005,145,000 (the “Series 2017 POBs”) for HMEPS and HPOPS, with earnings at the 7% per annum discount rates and allocable City contributions from July 1, 2016 through the Reform Effective Date. Any future actuarial loss liabilities will have an amortization period of 30 years from the date the loss is recognized, with a corresponding final payoff year and credits for any future gains.

*Statutory Authority.* The statutes governing the Pension Systems are as follows:

- (i) HMEPS: Article 6243h, Vernon’s Texas Civil Statutes, as amended (the “HMEPS Statute”);
- (ii) HPOPS: Article 6243g-4, Vernon’s Texas Civil Statutes, as amended (the “HPOPS Statute”); and
- (iii) HFRRF: Article 6243e.2(1), Vernon’s Texas Civil Statutes, as amended (the “HFRRF Statute” and, collectively with the HMEPS Statute and the HPOPS Statute, the “Pension Statutes”).

Below is a description of Pension System governance, the funding of the Pension Systems prior to pension reform, the Pension Reform Legislation and status of funding requirements.

*Governance.* Each Pension System is separately governed by a board of trustees that acts independently of the City. The Mayor appoints a designee to serve on the board of each Pension System, and the Director of Finance of the City appoints a trustee to the HFRRF Board and the HPOPS Board, while the City Controller appoints a trustee to the HMEPS Board. However, a majority of the trustees serving on each Pension System board are either full-time employees or retirees elected by participants in the respective Pension System and are themselves participants. These trustees have a personal interest in the plan administered by the board of the Pension System on which they serve. All trustees of a Pension System board take an oath to “diligently and honestly administer” such Pension System, and

each trustee is counseled and trained on his or her fiduciary responsibilities. Trustees appointed by the City are counseled that his or her fiduciary duties to the Pension System take precedence over the interests of the City and the official that appointed them. No legal challenges have arisen as a result of potential conflicts of interest. See “– Pending Pension System Litigation.”

The Pension Systems’ boards are generally imbued with broad powers to interpret, construe and supplement omissions in their governing statutes and to determine questions related to eligibility for membership, services and benefits, although their ability to act unilaterally with respect to the reforms enacted as part of the Pension Reform Legislation is limited. The grant of such powers to the Pension System boards may adversely affect the City’s ability to manage its Pension Obligations through mechanisms such as reducing the number of City full-time employees by outsourcing certain City functions.

In 2004, City voters opted out of an amendment to the Texas Constitution that otherwise would have prohibited a reduction in or impairment of the accrued retirement benefits or death benefits provided by a public employee retirement.

The Pension Systems are funded from City contributions, employee contributions and investment earnings, and the amount of funding required is related to the benefits projected to be paid to retirees. Each of the Pension Systems is currently underfunded.

### ***Pension System Funding Prior to Pension Reform Legislation***

Historically, the Pension Systems calculated unfunded liability as required by each Pension Statute pursuant to actuarial valuation reports prepared by firms retained by each respective Pension System. Prior to the Reform Effective Date (as described below), the City and the governing boards of HMEPS and HPOPS had agreed to changes in benefits, management, and funding of HMEPS and HPOPS through “meet and confer” agreements as allowed under their respective Pension Statutes. Accordingly, funding plans negotiated through the “meet and confer” process were not necessarily consistent with actuarially-determined contribution levels and component UAALs (determined by a standard actuarial cost method for the respective System) or Net Pension Liability, as determined by GASB 68. The current “meet and confer” agreement between HMEPS and the City is effective until July 1 of the year following the date that the City’s annual contribution rate meets or exceeds the actuarial required contribution. The current “meet and confer” agreement between HPOPS and the City is effective until 2023. From the Reform Effective Date, the Pension Reform Legislation governs most aspects of Pension System funding and City contributions. See “– *Municipal System*” and “– *Police System*.” Prior to the Reform Effective Date, the HFRRF Statute did not allow “meet and confer” negotiations or agreements to change or augment benefits, management or funding, and the authority to enter into such agreements after the Reform Effective Date is limited.

### ***Pension Reform Legislation***

The Pension Reform Legislation (<https://legiscan.com/TX/text/SB2190/2017>) amended the HMEPS Statute, the HPOPS Statute and the HFRRF Statute and enacted portions of the meet and confer agreements between the City and HMEPS and HPOPS. The Pension Reform Legislation includes recognition of unrealized losses in the Pension Systems and reductions in both anticipated earnings and the discount rate used to calculate the City’s future payments to 7.00% (which is lower than the discount rate assumptions used by the Pension Systems in prior actuarial reports), reductions in planned benefits, amortization of the Legacy Liability (see “– *Legacy Liability*”) over a fixed maximum 30-year period, and a limit on the maximum future City payments as a percentage of active employee payroll. For a comparison of actuarial liabilities of each Pension System before and after the Pension Reform Legislation, see “– *Status of Funding of the Pension Systems*.”

The Pension Reform Legislation augmented the principle provisions of the existing agreements between HMEPS and the City and HPOPS and the City, and authorizes future agreements between HMEPS, HPOPS and HFRRF under limited circumstances. Moreover, to the extent there is any conflict between the Pension Reform Legislation and any separate “meet and confer” agreements between HMEPS and the City, or HPOPS and the City, the Pension Reform Legislation controls; thus, any future agreements may not affect the calculation, payment of City obligations or benefit structure unless they conform to limitations and scope set forth in the Pension Reform Legislation. With respect to the enforcement of meet and confer agreements, the Texas Supreme Court has held that agreements under the Pension Statutes are contracts and do not amend the statutes. A suit for breach of such an

agreement by either the City or a Pension System could be subject to governmental immunity. See “– Pending Pension System Litigation.”

The principal changes to the Pension Statutes in the Pension Reform Legislation are as follows:

- Benefits and Contributions. The Pension Reform Legislation reduced future benefits and increased current employee contributions. No payments to existing retirees were reduced by the proposed amendments, but cost of living adjustments (“COLAs”) for current retirees were suspended for up to three years.
- Unfunded Liability. The unfunded pension obligation was reduced by the benefit changes (See “– Legacy Liability” below), amortized and required to be paid by the City over a fixed maximum 30-year period.
- Future Costs. The Pension Reform Legislation requires that future costs of the Pension Systems be calculated each Fiscal Year by actuarial valuations separately performed by each of the respective Pension Systems and the City. The annual valuation establishes the City’s legally mandated payments to meet the costs of the respective Pension Systems.
- Risk Sharing. The City and the Pension Systems share the risk that returns on pension assets are less than projected so that the City’s maximum annual contribution is capped.

Utilizing lower long-term discount rate assumptions, the total recalculated GASB Net Pension Liability of the Pension Systems as of July 1, 2016 was estimated by the City to be approximately \$8.21 billion. The City estimates the Pension Reform Legislation reduced the recalculated GASB Net Pension Liability by approximately \$2.9 billion, without giving effect to the Series 2017 POBs, which were delivered in December 2017. See “– Legacy Liability.” Certain of the estimates used herein depend upon the data provided by the Pension Systems and are subject to its completeness and accuracy. Such data is in the sole control of the respective Pension System. As part of the Pension Reform Legislation, the City issued the Series 2017 POBs to fund a portion of the Legacy Liability relating to the Municipal System and the Police System.

*The following is a general description of the principal benefit changes implemented by the Pension Reform Legislation.*

*Benefits Reforms.* In order to reduce and reform pension costs related to each Pension System, the Pension Reform Legislation (i) increased the age at which an employee can retire with full benefits for HPOPS and HFRRF; (ii) reduced the amount of benefits accrued in each year for HFRRF; and (iii) changed the types of pay included in salary for pension benefit calculations for HFRRF and HPOPS. Significantly, the Pension Reform Legislation suspended COLA increases for up to three years. The minimum guaranteed COLA for future benefits was reduced, and the age at which COLAs begin for retirees increased from no minimum age to age 55 for HPOPS retirees and from age 48 to age 55 for HFRRF retirees.

The Pension Reform Legislation substantially changed the Deferred Retirement Option Plans (“DROP”) for active employee members of HFRRF and HPOPS. DROP allows an active employee to be paid a salary and have the monthly pension benefit the employee would have received as a retiree credited to the DROP account. Credited benefits accumulate and are paid to the employee (or retiree, as applicable) as a lump sum, with attributed earnings and COLA increases, if any, at the end of the employee’s period of participation therein. Under the Pension Reform Legislation, the ability of active employees to enter the DROP program has been restricted by reducing the period during which an employee can enter such program. Over time, the legislation eliminates the opportunity for all employees to participate in the DROP program. Earnings reflect actual earnings of the applicable pension fund, with the payment guaranteed by the applicable Pension System. Prior to the Pension Reform Legislation, earnings attributed to a DROP account might not have reflected actual earnings of the appropriate pension fund, but payment thereof was guaranteed by the Pension System and, ultimately, the City. Additionally, among other changes, earnings on amounts credited to DROP accounts are aligned with expected earnings of the respective Pension Systems and COLAs for monthly DROP payments have been eliminated.

The Pension Reform Legislation increased employee contributions for each Pension Systems. Additionally, with respect to HMEPS, it reduced survivor benefits generally from 100% to 80% of the retirement benefit to which a deceased member would have been entitled. For HMEPS, a cash balance plan component was added for group D members, which is comprised of employees hired after January 1, 2008. In addition to the required employee contribution for group D members, the Pension Reform Legislation requires each group D member to contribute an additional 1.0% of salary to be credited to a notional cash balance plan account on the member's behalf. Such amounts are credited with earnings at a rate equal to the discount rate on amounts credited to an eligible member's DROP account. See "*Municipal System.*"

*Legacy Liability.* The Pension Reform Legislation implements a fixed maximum 30-year closed period (as opposed to the rolling 30-year open period used prior to pension reform) to amortize the Legacy Liability. Based on the separate risk sharing valuation studies conducted for each Pension System by the respective Pension System and for the City, the Legacy Liability for HMEPS is calculated to be \$2.0 billion as calculated by the City's actuary, compared to \$2.1 billion as calculated by the Pension System actuary; for HPOPS \$1.3 billion, as calculated by the Pension System actuary compared to \$1.4 billion as calculated by the City's actuary; and for HFRRF \$900 million, as calculated by the Pension System actuary compared to \$602 million as calculated by the City's actuary.

*Future Costs.* Costs of the Pension Systems arising after the Reform Effective Date are required to be calculated each Fiscal Year by actuarial valuations separately carried out by the respective Pension Systems and the City. The annual actuarial valuations establish the City's required payments to meet Pension System costs, based on pension system normal costs and unfunded accrued liabilities. New liability losses will be amortized over a new 30-year period. New liability gains will be amortized over the remaining period of the largest remaining liability loss layer or, if there is none, 30 years.

*Risk Sharing.* The Pension Reform Legislation enacted a risk sharing and cost control mechanism. Under the risk sharing mechanism, the City and each Pension System are required to share information and cooperate to evaluate the performance of the Pension System. The City and each Pension System are required to conduct an annual valuation study (the "RSVS"), which is subject to review by the Texas Pension Review Board. The initial RSVS process completed as part of the Pension Reform Legislation set the City's projected future contribution rates and the corridor midpoints as a percentage of projected pensionable payroll for each Pension System for the next 31 years. For years one through 30, the corridor midpoint for HMEPS ranges from 8.17% in Fiscal Year 2018 to 8.81% in Fiscal Year 2047. Similarly, for HPOPS the corridor midpoint ranges between 31.77% in Fiscal Year 2018 to 32.13% in Fiscal Year 2047, while the corridor midpoint for HFRRF is constant at 31.89% for the 30-year period. The projected contribution rates and the annual contribution rates for HPOPS and HFRRF include the amortization of the Legacy Liability. The annual cost of amortization of the Legacy Liability for HMEPS is excluded from the calculation of projected and annual contribution rates; however, the HMEPS Legacy Liability is paid on a fixed-dollar schedule rather than based on a percentage of pensionable payroll. Because pensionable payroll for each Pension System is projected to increase, the actual dollar amounts required to be paid based on the projected corridor midpoints and contribution rates are also projected to increase. The City's contribution rates for future Fiscal Years will be calculated by each subsequent year's RSVS.

Under the Pension Reform Legislation, because the differences in the calculations for HPOPS and HMEPS by the City and such Pension System for any year were less than two percent of projected payroll, the Pension System's calculations were used to establish the corridor midpoints for future years. Because the differences in HFRRF and the City's calculations for each year were greater than two percent of projected payroll, the arithmetic means of the City and Pension System calculations were used to establish the corridor midpoints.

The City bears the risk of pension contribution costs increasing up to 5% of pensionable payroll above the corridor midpoint. If the increase is greater than 5% of the pensionable payroll, then steps must be taken, including the reduction of benefits or increase of Pension System member contributions, to reduce the City's cost. Conversely, if costs are 5% of pensionable payroll less than projected for any plan, steps must be taken to maintain the City's contribution at the minimum level. If on or after July 1, 2021, the funded ratio of HPOPS or HFRRF is less than 65% as determined in an RSVS, then the City and the Pension System are required to establish a cash balance retirement plan for any new participants in HPOPS or HFRRF, as applicable. If on or after July 1, 2027, the funded ratio of HMEPS is less than 60% as determined in an RSVS, then the City and the Pension System are required to establish a cash balance retirement plan for any new participants in HMEPS.

### ***Investment Considerations Relating to the Implementation of Pension Reform***

The changes implemented under the Pension Reform Legislation were prospective. There are foreseen and unforeseen risks arising from these changes that could affect the general financial condition of the City and that should be considered by any potential investor. The City has identified the following investment consideration, but any potential investor should consult his or her own advisor, recognizing that additional risks may occur with implementation of the Pension Reform Legislation.

*Conduct of the RSVS.* The RSVS requires the sharing of information and comparison of results by the City and each Pension System. Although the Pension Reform Legislation requires the City and each Pension System to conduct the RSVS and to share information, failure to do so by the City or a Pension System could result in litigation or other enforcement efforts that could delay conduct of the RSVS in any year. If a Pension System fails to provide information, the City may conduct its RSVS based on estimates, but the estimated payments could carry a greater risk of under- or over-payments by the City.

### ***Status of Funding of the Pension Systems***

The following information is based on reports prepared reflecting the current system of funding and benefits under the Pension Statutes.

Changes in pension accounting rules resulted in significant changes to the presentation of the City's liabilities for each Pension System in its financial statements beginning in Fiscal Year 2015. For a comparison of the liabilities, see "*Net Pension Liability Under GASB 67 and 68*" below as well as Note 10 to the City's Financial Statements. GASB 67 and 68 do not affect the City's pension contributions or contribution rates.

The City has historically funded the Pension Systems in amounts agreed upon by the City and the respective boards of the Pension Systems either (i) as part of jointly-sponsored changes in State law or (ii) in negotiations with the Municipal System's and Police System's respective boards through the "meet and confer" process. As stated in the City's Monthly Financial Report dated as of June 30, 2020, the total amount of the City's contribution to the three Pension Systems for Fiscal Year 2020 was approximately \$433 million, which represents an approximate \$24.5 million increase from the Fiscal Year 2019 Actual Contribution. See "*Municipal System*," "*Police System*" and "*Firefighter Fund*."

The annual contribution to the Pension Systems is sufficient to fund the annual cost of amortizing the Legacy Liability and the normal and administrative costs of the Pension Systems.

*Net Pension Liability Under GASB 67 and 68.* As reflected in the schedule below, the financial statements reflect a calculation of the City's Net Pension Liability to describe the City's funding obligation to the Pension Systems. The "Net Pension Liability" is the difference between the City's "Total Pension Liability" and the "Fiduciary Net Position" under each respective Pension System's plan. The Total Pension Liability is the present value of pension benefits allocated to current members because of past service by the entry age normal actuarial cost method. It includes benefits related to projected salary and service and automatic cost of living adjustments. In addition, the ad hoc cost of living adjustments is included in the Total Pension Liability to the extent it is substantially automatic. Fiduciary Net Position is determined on the same basis used by each individual Pension System. The City's Net Pension Liability was measured as of June 30, 2019. For a more detailed break-out of Net Pension Liability for each Pension System, see Note 10 to the City's Financial Statements.

### **NET PENSION LIABILITY AS OF JUNE 30, 2019**

(in thousands)

	HFRRF	HMEPS	HPOPS
Total Pension Liability	\$4,928,809	\$5,236,133	\$6,920,548
Fiduciary Net Position	(4,237,692)	(3,100,999)	(5,674,648)
Net Pension Liability	\$ 691,117	\$2,135,134	\$1,245,900

The calculation of Net Pension Liability under GASB 67 and 68 as reported in the City's financial statements for Fiscal Year 2019 factors in the reforms enacted by the Pension Reform Legislation and reflects the delivery of the Series 2017 POBs. See Note 10 to the City's Financial Statements.

### Schedule 9: Actuarially Determined Contribution Amounts and Changes in Pension Plan Assets

Each part of the following schedules should be read in conjunction with the sections that follow describing in more detail the Pension Systems individually. Such information is historic; information relating to years prior to the Reform Effective Date (July 1, 2017, the first day of Fiscal Year 2018) does not reflect the Pension Reform Legislation calculation of the City's required contributions. See "– Employee Pension Funds – Pension Reform Legislation – Risk Sharing." Part 1 sets forth for each of the Fiscal Years 2015 through 2019 the amount of the annual pension cost to the City and the percentage contribution made by the City to each Pension System. Amounts paid in Fiscal Year 2017 were established by the meet and confer agreements with HPOPS and HMEPS and the HFRRF legislation in place prior to the Reform Effective Date. For Fiscal Year 2018 and thereafter, contribution amounts are established by the Pension Reform Legislation.

Part 2 sets forth for each of the Fiscal Years 2015 through 2020 actuarially determined amounts and actual City pension contribution amounts as a percentage of payroll. Part 3 sets forth certain information from the City's financial statements for Fiscal Year 2019 (June 30, 2019). The schedules reflect annual pension costs and contributions after the Reform Effective Date. See "Employee Pension Funds – Pension Reform Legislation."

#### Part 1: Annual Pension Costs and Contributions Made<sup>(a)</sup> (in millions)

Fiscal Year	Municipal System			Police System			Firefighter Fund		
	Annual Pension Cost	City Contrib. <sup>(b)</sup>	Percent Contrib.	Annual Pension Cost	City Contrib. <sup>(b)</sup>	Percent Contrib.	Annual Pension Cost	City Contrib. <sup>(c)</sup>	Percent Contrib.
2015 <sup>(d)</sup>	241.0	145.0	60	333.0	113.0	34	128.0	92.6	72
2016	315.3	160.0	51	340.0	137.4	40	223.0	94.3	42
2017 <sup>(e)</sup>	(319.1)	182.6	N/A	(594.1)	133.8	N/A	(318.2)	93.7	N/A
2018 <sup>(f)</sup>	383.9	171.6	45	353.3	137.1	39	210.4	83.0	39
2019	366.1	176.3	48	330.3	142.4	43	227.3	89.9	40

(a) For further details, see the City's Financial Statements for Fiscal Year 2019, particularly Note 10 and the section captioned "Required Supplementary Information."

(b) For Fiscal Years 2015-2017 contribution amounts were determined in accordance with the applicable "meet and confer" agreements. For Fiscal Year 2018 and thereafter, contribution amounts are determined by the applicable Pension Statute.

(c) Contribution amounts are determined by the applicable Pension Statute.

(d) Fiscal Year 2015 was the first year subject to GASB 68 accounting requirements. The change in accounting methodology caused a substantial increase in annual pension costs and contributions.

(e) As the result of the Pension Reform Legislation, for the Fiscal Year ended June 30, 2017, the City recognized a negative pension expense. Therefore, the percent contribution calculation is not applicable.

(f) City contribution amounts exclude the Series 2017 POBs in the amount of \$250 million for HMEPS and \$750 million for HPOPS.

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**Part 2: Actuarially Determined Contribution Amount and  
Actual City Contribution as a Percentage of Payroll<sup>(a)(b)</sup>**

Fiscal Year	Municipal System		Police System		Firefighter Fund	
	Actuarial	Actual	Actuarial	Actual	Actuarial	Actual
2015 <sup>(c)</sup>	27.5%	25.0%	36.0%	27.4%	33.2%	33.7%
2016	27.4	27.0	38.2	32.2	N/A <sup>(d)</sup>	33.4
2017	31.8	30.0	39.6	30.4	30.8	33.5
2018 <sup>(e)</sup>	27.8	28.1	31.8	33.2	31.9	31.9
2019 <sup>(f)</sup>	28.9	28.7	31.9	32.0	33.0	33.0
2020 <sup>(g)</sup>	29.3	TBD	31.8	TBD	32.3	TBD

- (a) For further details, see the City's Financial Statements for Fiscal Year 2019, particularly Note 10 and the section captioned "Required Pension System Supplementary Information." Actuarial numbers from the funding valuations prepared by the Pension Systems may be different from the GASB 68 accounting valuations used to prepare the City's financial statements.
- (b) Adopted actuarial reports for the respective Pension System for actuarially determined percentages and internal City figures for actual contribution percentages. See "*Municipal System*," "*Police System*" and "*Firefighter Fund*."
- (c) Fiscal Year 2015 was the first year subject to GASB 68 accounting requirements.
- (d) The Firefighter Fund did not perform a valuation for the period referenced.
- (e) Source: HMEPS Final Initial Risk Sharing Valuation Study as of July 1, 2016; HPOPS Final Risk Sharing Valuation Study as of June 30, 2016; and Joint Addendum to HFRRF Final Initial Risk Sharing Valuation Study as of July 1, 2016.
- (f) Source: HMEPS Risk Sharing Valuation Study as of July 1, 2017; HPOPS Risk Sharing Valuation Study as of July 1, 2017; and HFRRF Joint Addendum to Final Risk Sharing Valuation Study for Fiscal Year 2019. Actual Contributions for Fiscal Year 2019 are per the City's annual financial statements for Fiscal Year 2019. The HMEPS actuarial percentage for Fiscal Year 2019 is calculated based on 8.27% of payroll plus \$127 million. Using HMEPS's payroll assumption, the rate is approximately 28.9%.
- (g) Source: HMEPS Risk Sharing Valuation Study as of July 1, 2018; HPOPS Risk Sharing Valuation Study as of July 1, 2018; and HFRRF Joint Addendum to Final Risk Sharing Valuation Study for Fiscal Year 2020. Actual contributions for Fiscal Year 2020 are budgeted and equal the required actuarial contribution. The HMEPS actuarial percentage for Fiscal Year 2020 is calculated based on 8.32% of payroll plus \$131 million. Using HMEPS's payroll assumption, the rate is approximately 29.3%.

**Part 3: Changes in Pension Plan Assets<sup>(a)</sup>**  
(in millions)

Fiscal Year 2019	Municipal	Police	Fire	Total
Additions <sup>(b)</sup> .....	\$ 409.2	\$ 529.5	\$ 346.0	\$ 1,284.7
(Deductions) <sup>(c)</sup> .....	(297.1)	(341.5)	(278.6)	(917.2)
Net Increase .....	<u>\$ 112.1</u>	<u>\$ 188.0</u>	<u>\$ 67.4</u>	<u>\$ 367.5</u>
City's Total Contribution .....	<u>\$ 176.3</u>	<u>\$ 142.4</u>	<u>\$ 89.9</u>	<u>\$ 408.6</u>

- (a) Source: Pension Systems Financial Statements for Fiscal Year 2019.
- (b) Includes contributions by the employees and the City, net increase (decrease) in the fair value of investments, income from investments, and other income.
- (c) Includes benefits paid to members, refunds to members, and other costs, including professional services and administrative expenses.

***Houston Airport System's Contributions to the Municipal System***

The Fiscal Year 2021 Budget provides that the Airport System will be responsible for approximately \$20.1 million of the City's \$200.5 million contribution to the Municipal System. In Fiscal Year 2020, the Airport System was responsible for approximately \$19.4 million of the City's \$200.2 million contribution to the Municipal System.

In addition to the cash contributions made by the City, the City has issued \$448 million in Pension Obligations for the benefit of HMEPS. Although these bonds are secured by a pledge of ad valorem tax revenues, the Houston Airport System is responsible for repaying its pro-rata share of debt service on \$2.0 million of pension obligation bonds issued by the City in 2005. Interest expense on these bonds is \$106,500 per year. Principal payments will begin in Fiscal Year 2029. In January 2009, the City refunded its \$300 million 2004 Collateralized Pension Note (the "Pension Note"). The Houston Airport System did not participate in the refunding, but instead paid \$34.8 million in

cash to retire its share of the Pension Note. In December 2017, the City issued the Series 2017 POBs. In Fiscal Year 2018, the Houston Airport System transferred to the City \$27.61 million for its pro-rata share of the principal payable on the Series 2017 POBs on March 1, 2019. The Houston Airport System also paid its share of interest in Fiscal Year 2019, totaling \$608,248.30 and now has no continuing obligation on such Series 2017 POBs.

### ***Municipal System***

The Municipal System is a contributory defined benefits pension program that provides benefits to most municipal employees (other than classified police officers and firefighters) pursuant to three different programs. Employees hired prior to January 1, 1999 had a choice to enroll in either a contributory defined benefit program (“Group A”) under which, prior to the Reform Effective Date, the employees contributed 5% of their salary to the plan or a non-contributory plan (“Group B”). Employees hired between January 1, 1999 and January 1, 2008 are provided benefits pursuant to the Group A program. Employees hired after January 1, 2008 are covered by a defined benefit plan (“Group D”) which, prior to the Reform Effective Date, was non-contributory. The HMEPS Risk Sharing Valuation Study as of July 1, 2019 does not provide classification of active employees by their Groups. Prior year’s study reports that 40.89% of active employees of the City were enrolled in Group A, 10.23% were enrolled in Group B and 48.88% were enrolled in Group D. After the Reform Effective Date, Group A employees contribute 8% of their salary, Group B employees contribute 4% of their salary, and Group D employees contribute 2% of salary, plus 1% of salary placed in a notional cash balance plan account.

After the Reform Effective Date (for Fiscal Year 2018 and thereafter), the annual contribution is governed by the Pension Reform Legislation, and annual contributions for Fiscal Year 2020 to the Municipal System is 8.32% of payroll plus \$130.9 million. The Fiscal Year 2021 Budget includes annual contributions to the Municipal System of 8.36% of payroll plus \$134.5 million.

*Municipal System Fiscal Year Funding.* The City budgets its contributions by allocating the cost among its General Fund and Enterprise Funds based upon the nature of the employment of the covered employees. The Fiscal Year 2020 Budget provides that the General Fund was responsible for approximately \$65.3 million of the City’s approximately \$200.2 million contribution to the Municipal System (approximately 8.32% of payroll plus \$130.9 million). The Fiscal Year 2021 Budget provides that the General Fund will be responsible for approximately \$66.2 million of the City’s estimated \$200.5 million contribution to the Municipal System.

The schedule below reflects actuarial accrued liability, actuarial value of plan assets, unfunded actuarial accrued liability or surplus and funded ratio for each of the years 2015-2019. The information contained therein is derived from the HMEPS actuarial valuation reports for July 1, 2015. For 2016 through 2019, the values are based on the HMEPS Final Initial Risk Sharing Valuation Study as of July 1, 2016 through July 1, 2019 and July 1, 2018 and reflect the enactment of the Pension Reform Legislation. See “– Employee Pension Funds – *Pension Reform Legislation.*”

### **Schedule 9A: Municipal System Pension Plan Assets, Liabilities and Unfunded Actuarial Accrued Liability<sup>(a)</sup>** (in millions)

	As of July 1,				
	2015	2016	2017	2018	2019
		Post- Reform <sup>(b)</sup>	Post- Reform <sup>(c)</sup>	Post- Reform	Post- Reform
Actuarial Accrued Liability .....	\$4,766	\$4,735	\$4,866	\$4,982	\$5,091
Actuarial Value of Plan Assets <sup>(d)</sup> .....	2,583	2,626	2,743	2,875	3,019
Unfunded Actuarial Accrued Liability .....	\$2,183	\$2,109	\$2,123	\$2,107	\$2,072
Funded Ratio .....	54.2%	55.5%	56.4%	57.7%	59.3%

(a) Source: Municipal System Actuarial Valuation Reports. This information is no longer presented in the City’s financial statements.

(b) Source: HMEPS Final Initial Risk Sharing Valuation Study as of July 1, 2016. These values are post-Reform Effective Date, and reflect a reduction in the discount rate, changes in future benefits, delivery of the proceeds of the Series 2017 POBs, and allocable payments by the City in Fiscal Year 2017.

(c) Source: HMEPS Risk Sharing Valuation Study as of July 1, 2017. These values are post-Reform Effective Date, and reflect a reduction in the discount rate, changes in future benefits and delivery of the proceeds of the Series 2017 POBs.

(d) The actuarial value of plan assets is determined by the actuary for HMEPS. Such value was calculated using a generally accepted method of recognizing market gains and losses (relative to the assumed discount rate) over a five-year period.

### ***Police System***

The Police System is a contributory defined benefits pension program that provides benefits to the City's classified police officers. Prior to the Reform Effective Date, the City's annual contributions were determined through the "meet and confer" process; the board of trustees of the Police System and the City entered into an agreement in 2004, as amended in 2011, referred to herein as the "HPOPS Agreement."

*Police System Fiscal Year Funding.* The General Fund covers substantially all of the City's contributions to the Police System. The Fiscal Year 2019 contribution to HPOPS was \$142.4 million, excluding the proceeds of the Series 2017 POBs. The Fiscal Year 2020 and 2021 Budgets set the contribution to HPOPS at approximately \$149.2 million and \$154.2 million, respectively, as determined by the Pension Reform Legislation.

The schedule below reflects actuarial accrued liability, actuarial value of plan assets, unfunded actuarial accrued liability or surplus and funded ratio for each of the years 2015-2019. The information contained therein is derived from the HPOPS actuarial valuation reports from July 1 in each of the respective years. For 2016, the values are based on the HPOPS actuarial valuation report (pre-reform) and HPOPS Final Initial Risk Sharing Valuation Study as of July 1, 2016 (post-reform). The schedule reflects annual pension costs and contributions prior to and following the Reform Effective Date. See "– Employee Pension Funds – Pension Reform Legislation."

**Schedule 9B: Police System Pension Plan Assets,  
Liabilities and Unfunded Actuarial Accrued Liability<sup>(a)</sup>**  
(in millions)

	2015	As of July 1,				
		2016	2017	2018	2019	
		Pre- Reform <sup>(b)</sup>	Post- Reform <sup>(c)</sup>	Post- Reform <sup>(d)</sup>	Post- Reform	Post- Reform
Actuarial Accrued Liability .....	\$5,706	\$6,013	\$6,081	\$6,218	\$6,464	\$6,655
Actuarial Value of Plan Assets <sup>(e)</sup> .....	4,551	4,662	4,758	4,869	5,129	5,435
Unfunded Actuarial Accrued Liability.....	\$ 1,156	\$1,351	\$1,323	\$1,350	\$1,335	\$1,220
Funded Ratio.....	79.7%	77.5%	78.2%	78.3%	79.3%	81.7%

(a) Source: Police System Actuarial Valuation Reports. This information is no longer presented in the City's financial statements due to the implementation of GASB 68.

(b) Source: HPOPS Actuarial Valuation Report as of July 1, 2016. These values are prior to the Reform Effective Date.

(c) Source: HPOPS Final Initial Risk Sharing Valuation Study as of June 30, 2016. These values are post-Reform Effective Date, and reflect a reduction in the discount rate, changes in future benefits, delivery of the Series 2017 POBs and allocable payments by the City in Fiscal Year 2017.

(d) Source: HPOPS Risk Sharing Valuation Study as of July 1, 2017. These values are post-Reform Effective Date, and reflect a reduction in the discount rate, changes in future benefits and delivery of the proceeds of the Series 2017 POBs.

(e) The actuarial value of plan assets is determined by the actuary for the Police System. Such value was calculated using a generally accepted method of recognizing market gains and losses (relative to the assumed discount rate) over a five-year period.

### ***Firefighter Fund***

The Firefighter Fund provides benefits to the City's classified firefighters and is structured as a contributory defined benefits pension program. Prior to the Reform Effective Date, each fund member in active service made contributions to the fund in an amount equal to 9% of the member's salary at the time of the contribution. Under the Pension Reform Legislation, a firefighter must contribute 10.5% of his or her pensionable pay.

Prior to the Reform Effective Date, State law provided that the City's contribution to the Firefighter Fund be the greater of (i) two times the firefighter's contribution or (ii) an actuarially determined rate established at least once every three years. The City's contribution is now determined by the RSVS process. See "– Pending Pension System Litigation" regarding the firefighter lawsuit relating to the Pension Reform Legislation.

*Firefighter Fund Fiscal Year Funding.* The General Fund covers substantially all of the City's contributions to HFRRF. The Fiscal Year 2020 contribution to HFRRF was approximately \$83.7 million. The Fiscal Year 2021 Budget sets the contribution at \$79.8 million as determined by the Pension Reform Legislation. For a discussion of certain lawsuits related to HFRRF, see "– Pending Pension System Litigation."

The schedule below reflects actuarial accrued liability, actuarial value of plan assets, unfunded actuarial accrued liability or surplus and funded ratios for 2015 to 2019. The information contained therein is derived from the HFRRF Actuarial Valuations from July 1 in each of the respective years. The decrease in the funded ratio for 2016 shown in the schedule below is partially attributable to a change in the assumption for the rate of return on investment from 8.5% to 7.25%. For 2016, the values are shown based on both the HFRRF actuarial valuation report (pre-reform) and the initial RSVS calculation of the Legacy Liability as of July 1, 2016 (post-reform). See “– Employee Pension Funds – Pension Reform Legislation.”

**Schedule 9C: Firefighter Fund Pension Plan Assets,  
Liabilities and Unfunded Actuarial Accrued Liability<sup>(a)</sup>**  
(in millions)

	2015	As of July 1,				
		2016	2017	2018	2019	
		Pre- Reform <sup>(b)</sup>	Post- Reform <sup>(c)</sup>	Post- Reform <sup>(d)</sup>	Post- Reform	Post- Reform
Actuarial Accrued Liability .....	\$4,397	\$5,074	\$4,629	\$4,828	\$4,948	\$5,058
Actuarial Value of Plan Assets <sup>(e)</sup> .....	3,930	4,089	3,730	3,884	4,027	4,191
Unfunded Actuarial Accrued Liability.....	\$ 467	\$ 984	\$ 900	\$ 944	\$ 921	\$ 867
Funded Ratio.....	89.4%	80.6%	80.6%	80.4%	81.4%	82.9%

- (a) Source: Firefighter Fund Actuarial Valuation Reports. This information is no longer presented in the City’s financial statements.  
(b) Source: HFRRF Actuarial Valuation Report as of July 1, 2016. These values are prior to the Reform Effective Date.  
(c) Source: HFRRF Final Initial Risk Sharing Valuation Study as of July 1, 2016. These values are post-Reform Effective Date, and reflect a reduction in the discount rate, changes in future benefits, and allocable payments by the City in Fiscal Year 2017.  
(d) Source: HFRRF Risk Sharing Valuation Study as of July 1, 2017. These values are post-Reform Effective Date, and reflect a reduction in the discount rate and changes in future benefits.  
(e) The actuarial value of the plan assets is determined by the actuary for the HFRRF. Such value was calculated using a generally accepted method of recognizing market gains and losses (relative to the assumed discount rate) over a five-year period.

### Pending Pension System Litigation

*Firefighter Litigation Regarding Pension Reform Legislation.* In *Houston Firefighters’ Relief and Retirement Fund v. City of Houston, et. al.*, filed on May 30, 2017, the Firefighter Fund sued the City and various City officials asserting a facial challenge to the constitutionality of the Pension Reform Legislation passed in the 2017 legislative session and sought injunctive relief and declaratory judgment in respect to such legislation. Specifically, the Firefighter Fund alleged that the Pension Reform Legislation violates Article XVI, Section 67 of the Texas Constitution because it allegedly violates the Firefighter Fund’s Board of Trustee’s “exclusive” authority to select an actuary, and adopt actuarial assumptions regarding the City contribution rates. The Attorney General of Texas intervened to defend the constitutionality of the Pension Reform Legislation. On June 30, 2017, the district court judge sustained all the City defendants’ Pleas to the Jurisdiction, ordered that the case be dismissed in its entirety, and, in the alternative, should the dismissal be found to have been granted in error, denied the Firefighter Fund’s request for a temporary injunction. On June 20, 2019, the Court of Appeals ruled in favor of the City and City officials and affirmed the trial court’s dismissal of all claims against them. The Firefighter Fund filed a petition for review in the Supreme Court seeking to challenge the appeals court ruling. On November 8, 2019, the Supreme Court requested the City parties to respond to the petition, which they did in early January 2020. On July 26, 2019, HFRRF filed a separate, as-applied constitutional challenge to the Pension Reform Legislation largely asserting the same allegations and arguments as the facial challenge in the first suit. On March 13, 2020, the Supreme Court denied the petition for review filed by the Firefighter Fund; the deadline for the Firefighter Fund to file any motion for rehearing has passed. The second suit by the Firefighter Fund raising the as-applied constitutional challenge remains pending. The City intends to continue to vigorously defend this litigation.

*Litigation Regarding HMEPS.* The City is also currently involved in a lawsuit involving the Municipal System. Before this current suit, on March 20, 2015, the Texas Supreme Court issued its opinion in *Klumb v. Houston Municipal Employees Pension System* (“*Klumb*”). At issue in the case was whether the board of HMEPS violated the HMEPS Statute by resolving that employees of certain local government corporations and not-for-profit corporations are employees of the City for purposes of membership in the Municipal System. The Texas Supreme Court found, among other things, that the HMEPS board’s actions were within its “broad discretionary authority” under the HMEPS

Statute, and thus held that the City and individual plaintiffs there “failed to plead actionable ultra vires and constitutional claims against the Municipal System and the Trustees.” Following the issuance of the Texas Supreme Court’s ruling in *Klumb*, the Municipal System asked the City to turn over certain identifying information and make pension contributions for employees of the local government corporations and not-for-profit corporations at issue in that case. On June 18, 2015, the Municipal System initiated a new lawsuit, seeking mandamus relief and asserting an ultra vires action against the City, the Mayor and several other City officers. The City filed a counterclaim against HMEPS and third-party claim against the HMEPS board members alleging breach of the “meet and confer” agreement and other claims related to the Municipal System’s definition of “employee.” The Municipal System parties filed a motion for summary judgment and the City defendants filed a plea to the jurisdiction. In October 2015, the trial court denied the plea to the jurisdiction, and the City defendants filed an interlocutory appeal. The trial court did not rule on the summary judgment motion filed by the Municipal System parties. The Court of Appeals affirmed in part, reversed in part, rendered judgment in part, and remanded with instructions in part. The denial of the City’s plea was reversed in part and affirmed in part by the Court of Appeals. The City defendants and the Municipal System each filed a petition for review in the Texas Supreme Court. In June 2018, the Texas Supreme Court ruled mostly in favor of HMEPS in a decision that affirmed in part, reversed in part, rendered judgment in part, and remanded the case in part back to the trial court for further proceedings. On October 12, 2018, the trial court denied the City defendants’ Plea to the Jurisdiction and granted the HMEPS parties’ Motion for Summary Judgment, with the exception of HMEPS’s request for an award of attorneys’ fees. The trial court severed the attorneys’ fees issue from the case to proceed to trial as a separate case. In October 2018, the City parties filed a notice of appeal of the trial court’s order for severance and the judgment. The City parties also filed an original petition in the Court of Appeals seeking a writ of mandamus compelling the trial court to set aside its severance order and final judgment in favor of the HMEPS parties. On March 26, 2019, the Court of Appeals consolidated the appeal and mandamus into a single proceeding and cause number. The parties then settled HMEPS’s claim for mandamus relief and request for attorney fee recovery under the Texas Public Information Act and the City provided information sought by HMEPS for the purposes of evaluating possible settlement of the rest of the dispute. As part of the settlement, the parties also requested the appeals court to dismiss the City’s mandamus petition in that court challenging the trial court’s severance of the attorney fee issue and likewise requested the appeals court to abate the direct appeal to allow the parties time to evaluate possible settlement of the rest of the dispute. The appeals court granted the request, dismissed the mandamus petition by the City and abated the direct appeal. The abatement ended on February 10, 2020. The parties have all filed their briefs in the appeal and also are working on a possible settlement of the rest of the dispute. The case remains pending in the Court of Appeals for decision. The City intends to continue to vigorously defend this litigation in the event no such settlement occurs.

## **City Charter Tax and Revenue Propositions**

### ***General***

In addition to certain constitutional and statutory limitations described above, the City may limit, increase or change the revenue resources available during a given Fiscal Year, either by voter authorization as provided by the City Charter or by amending the City Charter itself. The City Charter may not be amended more frequently than once every two years. Voters of the City have limited increases in ad valorem tax revenues and other revenues in Proposition 1 (codified in Article III, Sec. 1 and Article IX, Sec. 20, City Charter) and Proposition 2 (codified in Article VI-a, Sec. 7, City Charter, but not effective). Voters also have increased available revenue sources in Proposition G (codified in Article IX, Sec. 21, City Charter) and Proposition H, which did not amend the City Charter. Notwithstanding any limitations on revenue described below, the City Charter provides that, in preparing the City’s budget, provision shall first be made for the payment of debt service on the City’s outstanding Tax Obligations, with remaining revenues to be apportioned among the City’s respective departments. In future Fiscal Years, the amount of the tax levy allocated to debt service may need to be increased, reducing the amount available for the delivery of essential governmental services unless there is a corresponding increase in the overall tax levy or other revenues.

### ***Proposition 1 and Proposition 2 (2004)***

In 2004, voters approved Proposition 1 (now codified as Article III, Sec. 1 and Article IX, Sec. 20, City Charter) in order to limit increases in (i) the City’s ad valorem tax revenues by requiring voter approval for increases in ad valorem taxes in future years above a limit equal to the lesser of the actual revenues in the preceding Fiscal Year, plus 4.5%, or a formula that is based upon the actual revenues received in Fiscal Year 2005 adjusted for the cumulative

combined rates of inflation and the City’s population growth; and (ii) water and sewer rates (i.e., the City’s Combined Utility System) by limiting rate increases to the combined increases in the rates of inflation and population growth, excluding rate increases required by certain bond covenants and rates established by contract, unless approved by the voters. At the same election, the voters also approved Proposition 2 (Article VI-a, Sec. 7, City Charter), which proposed to limit increases in the City’s “combined revenues,” including revenues of the General Fund, Special Funds and Enterprise Funds. Based on the specific language of Proposition 1 and Proposition 2, the number of votes for each proposition, and the language of the City Charter, the City declared that Proposition 2 was not effective.

### ***Proposition 2 Litigation***

Supporters of Proposition 2 filed a lawsuit to declare Proposition 2 effective. After protracted litigation, on August 26, 2011, the Texas Supreme Court vacated the judgment of the trial court (for lack of ripeness) without reference to the merits and dismissed the case for want of jurisdiction. In April 2014, the suit was refiled. The City filed a plea to the jurisdiction, which was denied by the district court. The City appealed the denial. On August 17, 2017, the appeals court affirmed the trial court’s denial of the plea. The City filed a petition for review with the Texas Supreme Court, which was denied, and the case has been remanded to the trial court. The City’s Supplemental Plea to the Jurisdiction/Motion for Summary Judgment and Motion for Reconsideration was heard on May 24, 2019; however, the judge allowed plaintiffs to file a counter-motion for summary judgment. The court granted the City’s Motion for Summary Judgment on September 16, 2019, and denied plaintiff’s Motion for Summary Judgment. On October 4, 2019, the trial court held a bench trial on the remaining issues. On October 29, 2019, the trial court held for the City, ordering that the plaintiffs take nothing. The plaintiff has challenged the trial court’s disposition. The City intends to vigorously defend this litigation.

### ***Propositions G and H***

In response to Proposition 1 and Proposition 2, the City held an election on November 7, 2006, at which the voters approved Proposition G and Proposition H, both of which are currently effective. Proposition G amended the City Charter to exclude revenues of the City’s enterprise systems (i.e., Combined Utility System, Houston Airport System and the Convention and Entertainment Facilities Department) from the types of revenues limited under the City Charter. Voter approval of Proposition G removed the enterprise systems from the revenue limitations of Proposition 2, although the limitation on water and sewer rate increases included in Proposition 1 remains in effect. ***Consequently, the Houston Airport System revenues are exempted from the revenue limitations imposed on the City by Propositions 1 and 2.*** Proposition H allows the City to collect and spend up to \$90 million of revenue, over and above any Proposition 2 limitations, for increased police, fire and emergency medical services and related matters. The amount collected and spent in each year becomes part of the base revenue calculations for the following year. Propositions G and H are incorporated into the City’s Financial Policies (defined below), and the City has collected revenues and made expenditures for public safety purposes in compliance with Proposition H.

### ***Passage of Proposition B; Effect on Future City Budgets and Services; Status of Litigation***

The Houston Professional Fire Fighters Association (the “Firefighter Union”) presented a petition to the City to amend the City’s Charter with regard to the compensation of the City’s firefighters. On November 6, 2018, the voters approved a proposition adding a charter amendment (hereinafter “Proposition B”) to cause the City to compensate its firefighters in an amount that is “at least equal and comparable by rank and seniority” to the City’s police officers. Proposition B does not identify a revenue source or define what “equal and comparable” means with respect to police officers and firefighters. The Fiscal Year 2020 Proposed Budget included funding of \$79 million for classified pay increases associated with the passing of Proposition B.

Implementation of Proposition B is the subject of ongoing litigation. Before the Fiscal Year 2020 Budget was adopted, the Harris County District Court, on May 15, 2019, granted the City’s Motion for Summary Judgment and ruled that Proposition B is preempted in its entirety and unconstitutional. Based on the trial court’s order, the City adopted a revised Fiscal Year 2020 budget which does not include the implementation of Proposition B, and Proposition B is expected to have no impact on the City budget and services during Fiscal Year 2020.

The Firefighter Union filed a Notice of Appeal of the trial court’s order. Mediation to resolve the claim has been unsuccessful. If the City is required to implement Proposition B in the future, the City will consider a number of options, including reducing overall budgetary spending, phasing in compensation parity over multiple Fiscal Years,

creating additional revenue sources to increase available revenues, reaching an agreement with the Firefighter Union, or some combination of these options.

Based on current estimates, it is expected that the impact to the Houston Airport System will be minimal. The Houston Airport System pays certain interfund transfers to the City's General Fund for certain firefighter services, which in Fiscal Year 2019 are budgeted to be approximately \$20 million or 6% of the Houston Airport System's operating budget. It is expected that Proposition B may increase that amount by approximately 25%, which is subject to change to the extent that the assumptions used by the City are modified.

## **LITIGATION AND REGULATION**

### **Houston Airport System Claims and Litigation**

The City is aware of various pending claims and lawsuits associated with the operation of the Houston Airport System. These include, but are not limited to, certain personal injury claims, claims involving rents and charges and property disputes. The City intends to defend itself vigorously against these claims and lawsuits; however, no prediction of the City's liability with respect to the claims, or the final outcome of the lawsuits, can be made at this time. In the opinion of management of the Houston Airport System, it is improbable that such claims and lawsuits now outstanding against the City that are associated with the operation of the Houston Airport System could become final in a time and manner so as to have a material adverse financial impact upon the operations of the City or the Houston Airport System.

### **Other Claims and Litigation Affecting the City**

The City is a defendant in various lawsuits and is aware of pending claims arising in the ordinary course of its municipal and enterprise activities, certain of which seek substantial damages. That litigation includes lawsuits claiming damages that allege that the City caused personal injuries and wrongful deaths; class actions and other lawsuits and claims alleging discriminatory hiring and promotion practices and certain civil rights violations arising under the Federal Voting Rights Act; various claims from contractors for additional amounts under construction contracts; claims involving property tax assessments; suits over the validity of City ordinances and over their enforcement; suits alleging non-compliance with certain federal and state environmental statutes; and various other liability claims. The status of such litigation ranges from an early discovery stage to various levels of appeal of judgments both for and against the City. The amount of damages is limited in certain cases under the Texas Tort Claims Act and is subject to appeal. The City intends to defend itself vigorously against the suits; however, no prediction can be made, as of the date hereof, with respect to the liability of the City for such claims or the final outcome of such suits.

The City is also aware that various claims for inverse condemnation have been and may be asserted against the City in connection with the City's operations, the aggregate amounts of which are unknown. The City intends to defend itself vigorously against all such inverse condemnation claims; however, the City's liability with respect to these claims cannot be predicted.

*Allens Creek Reservoir Forced Sale and Litigation.* H.B. 2846, passed during the 86th Session of the Texas Legislature and signed into law on June 2, 2019, mandates that the City sell its ownership interest in Allens Creek Reservoir to the Brazos River Authority at or below a capped price of \$23 million. The City has filed a suit in state district court in Travis County seeking a declaratory judgment that H.B. 2846 is invalid and unenforceable because it violates the Texas Constitution. In particular, H.B. 2846 requires an unconstitutional forced sell of property and is an unconstitutional local law. In addition, it is a retroactive law and, in violation of the Texas Constitution, imposes debt on the Brazos River Authority. Finally, the City seeks a declaratory judgment that H.B. 2846 is void because the state lacks legal authority to force the City to enter into a specific contract to sell vested water rights. The trial court granted the City's Motion for Summary Judgment and ruled that H.B. 2846 is unconstitutional and void. Brazos River Authority filed a Notice of Appeal, and the case is currently pending in the Third Texas Court of Appeals. For a discussion of certain lawsuits related to the City's Pension Systems, see "THE CITY AND CITY FINANCIAL INFORMATION – Pending Pension System Litigation."

Additionally, the City has received various claims related to Hurricane Harvey, none of which have become a lawsuit, alleging that the City released water from reservoirs causing the flooding of nearby residential and

commercial properties and vehicles. The claims consist of both requests for compensation for loss from individual claimants and claims from insurance companies for their insureds' losses. The claims allege either a constitutional taking under the Texas Constitution, a nuisance claim, or simply that the City released the water causing harm to the claimants' property. The City intends to defend itself vigorously against all such claims; however, the City's liability with respect to these claims cannot be predicted.

### **State Legislation**

Although the City is a home-rule city under the Texas Constitution, it may not adopt ordinances or charter provisions inconsistent with Texas law. The Texas Legislature may enact legislation that (i) materially increases the costs and expenditures of the City or (ii) reduces the ability of the City to collect ad valorem taxes or other revenues described herein. Under the Texas and United States Constitutions, the Texas Legislature may not, however, enact legislation that impairs the City's ability to pay principal of and interest on its indebtedness.

The Texas Legislature may consider bills that could have a direct impact on the City, its operations or the administrative agencies that oversee the City. The City can make no representations or predictions concerning the substance or the effect of any legislation that may be passed in the future. The City also cannot predict whether the Governor will exercise his power under the Texas constitution to call special sessions.

### **Environmental Regulation**

The City is subject to State and federal environmental laws and regulations. These laws and regulations are subject to change, and the City may be required to expend substantial funds to meet the requirements of such regulatory authorities, such as requirements relating to quality of the City's water supply or wastewater discharges or to the handling and disposal of wastes. Failure to comply with these laws and regulations may result in the imposition of administrative, civil and criminal penalties, or the imposition of an injunction requiring the City to take or refrain from taking certain actions. In addition, the City may be required to remediate contamination as a result of City operations or on properties owned by others.

### **Other Environmental Measures**

Air quality control measures required by the United States Environmental Protection Agency (the "EPA") and the Texas Commission on Environmental Quality ("TCEQ") may adversely affect new industrial, commercial and residential development in Houston and adjacent areas. Under the Clean Air Act Amendments of 1990, the eight county Houston-Galveston-Brazoria Area ("HGB Area") has been designated by the EPA as a non-attainment area under the EPA's ozone standards. Such areas are required to demonstrate progress in reducing ozone concentrations each year until compliance with the EPA's standards is achieved. To provide for annual reductions in ozone concentrations, the EPA and the TCEQ have imposed increasingly stringent limitations on emissions of volatile organic compounds and nitrogen oxides (chemical precursors of ground level ozone) from existing stationary sources of air emissions. In addition, any significant new source of those types of emissions, such as a new industrial plant, must provide for a net reduction of those air emissions by arranging or paying for reductions of emissions by 1.3 times the amount of pollutants proposed to be emitted by the new source. Even though existing air emissions controls are quite stringent, studies have indicated that even more stringent air emissions controls may be necessary in order for the HGB Area to achieve compliance with ozone standards. Due to the magnitude of air emissions reductions required as well as shortage of economically reasonable control options, the development of a successful air quality compliance plan has been and continues to be extremely challenging and will inevitably impact a wide cross-section of the business and residential community. More stringent controls on sources of air emissions in the HGB Area could make the Houston area a less attractive location to businesses in comparison to other areas of the country that are not subject to similarly stringent air emissions controls. Although air quality data indicates steady improvement in the HGB area, if it fails to meet the EPA's standards, the EPA may impose a moratorium on the awarding of federal highway construction grants and other federal grants for certain public works construction projects. The EPA may also impose even more stringent emissions offset requirements on new major sources of emissions for which construction has not already commenced.

Other constraints on economic growth and development include lawsuits filed under the Clean Air Act by plaintiffs seeking to require emission reduction measures that are even more stringent than those adopted by TCEQ and approved by EPA. From time to time, various plaintiff environmental organizations have filed lawsuits against



TCEQ and EPA seeking to compel the early adoption of additional emission reduction measures, many of which could make it more difficult for businesses to construct or expand industrial facilities or which could result in travel restrictions or other limitations on the actions of businesses, governmental entities and private citizens. Any successful court challenge to the currently effective air emissions control plan could result in the imposition of even more stringent air emission controls that could threaten continued growth and development in the HGB Area.

### **Storm Activity and Periodic Flooding**

Downtown Houston is located approximately 50 miles north of the Gulf of Mexico. The Gulf region is prone to seasonal hurricane activity; major hurricanes or related storms may develop. Owing in part to its relatively flat topography and moist coastal climate, certain areas in the City are subject to periodic flooding and associated severe property damage as a result of hurricanes and storm events. In addition to the damage experienced from Hurricane Harvey, the City has experienced three other major floods in the past five years: the 2015 Memorial Day Flood, the 2016 Tax Day Flood and Tropical Storm Imelda in 2019.

The City and Harris County each participate in the National Flood Insurance Program, which is administered by FEMA. Communities participating in the National Flood Insurance Program are required by FEMA to adopt restrictions on development in designated flood prone areas. In exchange, the National Flood Insurance Program makes federally subsidized flood insurance available to homeowners, renters, and business owners located in the participating communities.

In connection with its administration of the National Flood Insurance Program, from time to time FEMA will revise its Flood Insurance Rate Maps, which classify the relative flooding potential of geographic areas. FEMA revised its Flood Insurance Rate Maps for the Greater Houston area as well as unincorporated Harris County in late 2006. As a result of this most recent revision, some homes and businesses within the City and the surrounding area that were outside of the 100-year flood plain (those areas that are determined to have a greater than 1% chance of flooding in any given year) under the previous Flood Insurance Rate Maps are now included in the 100-year flood plain. Residential, commercial, and industrial properties in the City that recently have been reclassified as being within the 100-year flood plain could experience a diminution in value, the extent of which has not yet been determined. It is anticipated that a pending federal climate study will result in flood plain map changes that will significantly increase the 100-year flood elevation and flood plain.

The City is currently pursuing hazard mitigation grants from FEMA to fund flood mitigation and/or flood damage reduction projects. Mitigation projects may include home buyouts, home elevations and home reconstruction. Flood damage reduction projects may consist of channel widening, regional water detention and stream diversions. These projects will be coordinated with the other local agencies responsible for watershed management.

### **RATINGS**

The rating services of Moody's Investors Service, Inc. ("Moody's"), and from S&P Global Ratings, a S&P Global Ratings Financial Services LLC business ("S&P"), have assigned ratings of "A1" and "A," respectively, on the Series 2020 Bonds. Ratings reflect only the views of the rating agencies, from whom an explanation of the significance of such ratings may be obtained. There is no assurance that ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely if, in the judgment of the rating agency, circumstances so warrant. Any such downward revision or withdrawal could have an adverse effect on the market price of the Series 2020 Bonds. The City and the Co-Financial Advisors will undertake no responsibility to oppose any revision or withdrawal of such ratings.

Due to changes in rating criteria and the current economic conditions of the United States, obligations issued by state and local governments, such as the Series 2020 Bonds, could be subject to a rating downgrade. Additionally, if a significant financial crisis or budgetary reductions should occur in the affairs of the U.S. Government or of any of its agencies or political subdivisions, then such an event could adversely affect the market for and ratings, liquidity and market value of outstanding debt obligations, including the Series 2020 Bonds.

## VERIFICATION OF MATHEMATICAL ACCURACY

Samuel Klein and Company, Certified Public Accountants, and Public Finance Partners LLC (the “Verification Agents”) will jointly prepare and deliver to the City, on or before the Date of Delivery of the Series 2020 Bonds, a verification report indicating that it has verified the mathematical accuracy of (a) the mathematical computations of the adequacy of the cash to repay the principal portion of the redemption drawing on the letter of credit relating to the 2020B Refunded Bonds, (b) the mathematical computations of the adequacy of the cash and the maturing principal of and interest on the Escrowed Securities to pay, when due, the maturing principal of, interest on and related call premium requirements, if any, of the 2020C Refunded Bonds and (c) the mathematical computations of yield used by Tax Counsel to support its opinion that interest on the Tax-Exempt Bonds will be excluded from gross income for federal income tax purposes.

The Verification Agents will rely on the accuracy, completeness and reliability of all information provided to it by, and on all decisions and approvals of, the City. In addition, the Verification Agents will rely on any information provided to it by the City’s retained advisors, consultants or legal counsel.

## TAX MATTERS FOR THE TAX-EXEMPT BONDS

**The following discussion of certain federal income tax considerations is for general information only and is not tax advice. Each prospective purchaser of the Tax-Exempt Bonds should consult its own tax advisor as to the tax consequences of the acquisition, ownership and disposition of the Tax-Exempt Bonds.**

### **Tax Exemption**

In the opinion of Bracewell LLP, in its capacity as Tax Counsel (in such capacity, “Tax Counsel”), under existing law, interest on the Series 2020A Bonds (i) is excludable from gross income for federal income tax purposes under section 103 of the Internal Revenue Code of 1986, as amended (the “Code”), except for any period during which a Series 2020B Bond is held by a person who is a “substantial user” of the facilities financed or refinanced with the proceeds of the Series 2020A Bonds or a “related person” to such a “substantial user,” each within the meaning of section 147(a) of the Code and (ii) is an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer’s alternative minimum tax liability. Furthermore, in the opinion of Tax Counsel, under existing law, (i) interest on the Series 2020B Bonds is excludable from gross income for federal income tax purposes under section 103 of the Code and (ii) the Series 2020B Bonds are “private activity bonds” within the meaning of the Code, but pursuant to the American Recovery and Reinvestment Act of 2009, interest on the Series 2020B Bonds is not an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer’s alternative minimum tax liability.

The Code imposes a number of requirements that must be satisfied for interest on state or local obligations, such as the Tax-Exempt Bonds, to be excludable from gross income for federal income tax purposes. These requirements include, among other things, limitations on the use of the bond-financed project, limitations on the use of bond proceeds and the source of repayment of bonds, limitations on the investment of bond proceeds prior to expenditure, a requirement that excess arbitrage earned on the investment of bond proceeds be paid periodically to the United States and a requirement that the issuer file an information report with the Internal Revenue Service (the “Service”). The City has covenanted in the Ordinance that it will comply with these requirements.

Tax Counsel’s opinion will assume continuing compliance with the covenants of the Ordinance pertaining to those sections of the Code that affect the excludability of interest on the Tax-Exempt Bonds from gross income for federal income tax purposes and, in addition, will rely on representations by the City, the City’s Co-Financial Advisors and the Underwriters with respect to matters solely within the knowledge of the City, the City’s Co-Financial Advisors and the Underwriters, respectively, which Tax Counsel have not independently verified. Tax Counsel will further rely on the report (the “Report”) of the Verification Agents regarding the mathematical accuracy of certain computations. If the City fails to comply with the covenants in the Ordinance or if the foregoing representations or the Report are determined to be inaccurate or incomplete, interest on an issue of the Tax-Exempt Bonds could become includable in gross income from the date of original delivery of each such issue of the Tax-Exempt Bonds, regardless of the date on which the event causing such inclusion occurs.

The Code imposes an alternative minimum tax on the “alternative minimum taxable income” of an individual, if the amount of such alternative minimum tax is greater than the amount of such individual’s regular income tax. Generally, the alternative minimum taxable income of an individual will include items of tax preference under the Code, such as the amount of interest received on “private activity bonds” issued after August 7, 1986. Accordingly, Tax Counsel’s opinion will state that interest on the Series 2020A Bonds is an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer’s alternative minimum tax liability. While the Series 2020B Bonds are “private activity bonds” within the meaning of the Code, pursuant to the American Recovery and Reinvestment Act of 2009, interest on the Series 2020B Bonds is not an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer’s alternative minimum tax liability.

Except as stated above, Tax Counsel will express no opinion as to the amount of interest on the Tax-Exempt Bonds or any federal, state or local tax consequences resulting from the receipt or accrual of interest on, acquisition, ownership or disposition of, the Tax-Exempt Bonds. Certain actions may be taken or omitted subject to the terms and conditions set forth in the Ordinance upon the advice or with an approving opinion of counsel. Tax Counsel will express no opinion with respect to Tax Counsel’s ability to render an opinion that such actions, if taken or omitted, will not adversely affect the excludability of interest of the applicable issue of the Tax-Exempt Bonds from gross income for federal income tax purposes.

Tax Counsel’s opinions are based on existing law, which is subject to change. Such opinions are further based on Tax Counsel’s knowledge of facts as of the date thereof. Tax Counsel assumes no duty to update or supplement their opinions to reflect any facts or circumstances that may thereafter come to Tax Counsel’s attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, Tax Counsel’s opinions are not a guarantee of result and are not binding on the Service; rather, such opinions represent Tax Counsel’s legal judgment based upon their review of existing law and in reliance upon the representations and covenants referenced above that they deem relevant to such opinions. The Service has an ongoing audit program to determine compliance with rules that relate to whether interest on state or local obligations is includable in gross income for federal income tax purposes. No assurance can be given as to whether or not the Service will commence an audit of either issue the Tax-Exempt Bonds. If an audit is commenced, in accordance with its current published procedures, the Service is likely to treat the City as the taxpayer and the Owners may not have a right to participate in such audit. Public awareness of any future audit of any issue of the Tax-Exempt Bonds could adversely affect the value and liquidity of such Tax-Exempt Bonds regardless of the ultimate outcome of the audit.

## **Additional Federal Income Tax Considerations**

### ***Collateral Tax Consequences***

Prospective purchasers of the Tax-Exempt Bonds should be aware that the ownership of tax-exempt obligations may result in collateral federal income tax consequences to financial institutions, life insurance and property and casualty insurance companies, certain S corporations with Subchapter C earnings and profits, individual recipients of Social Security or Railroad Retirement benefits, taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations, low and middle income taxpayers qualifying for the health insurance premium assistance credit, and individuals otherwise qualifying for the earned income tax credit. In addition, certain foreign corporations doing business in the United States may be subject to the “branch profits tax” on their effectively connected earnings and profits, including tax-exempt interest such as interest on the Tax-Exempt Bonds. These categories of prospective purchasers should consult their own tax advisors as to the applicability of these consequences. Prospective purchasers of the Tax-Exempt Bonds should also be aware that, under the Code, taxpayers are required to report on their returns the amount of tax-exempt interest, such as interest on the Tax-Exempt Bonds, received or accrued during the year.

### ***Tax Accounting Treatment of Original Issue Premium***

The issue price of all of the Tax-Exempt Bonds exceeds the stated redemption price payable at maturity of such Tax-Exempt Bonds. Such Tax-Exempt Bonds (the “Premium Bonds”) are considered for federal income tax purposes to have “bond premium” equal to the amount of such excess. The basis of a Premium Bond in the hands of an initial owner is reduced by the amount of such excess that is amortized during the period such initial owner holds such Premium Bond in determining gain or loss for federal income tax purposes. This reduction in basis will increase

the amount of any gain or decrease the amount of any loss recognized for federal income tax purposes on the sale or other taxable disposition of a Premium Bond by the initial owner. No corresponding deduction is allowed for federal income tax purposes for the reduction in basis resulting from amortizable bond premium. The amount of bond premium on a Premium Bond that is amortizable each year (or shorter period in the event of a sale or disposition of a Premium Bond) is determined using the yield to maturity on the Premium Bond based on the initial offering price of such Premium Bond.

The federal income tax consequences of the purchase, ownership and redemption, sale or other disposition of Premium Bonds that are not purchased in the initial offering at the initial offering price may be determined according to rules that differ from those described above. All owners of Premium Bonds should consult their own tax advisors with respect to the determination for federal, state, and local income tax purposes of amortized bond premium upon the redemption, sale or other disposition of a Premium Bond and with respect to the federal, state, local, and foreign tax consequences of the purchase, ownership, and sale, redemption or other disposition of such Premium Bonds.

### **Tax Legislative Changes**

Current law may change so as to directly or indirectly reduce or eliminate the benefit of the excludability of interest on the Tax-Exempt Bonds from gross income for federal income tax purposes. Any proposed legislation, whether or not enacted, could also affect the value and liquidity of the Tax-Exempt Bonds. Prospective purchasers of the Tax-Exempt Bonds should consult with their own tax advisors with respect to any recently-enacted proposed, pending or future legislation.

## **TAX MATTERS FOR THE TAXABLE BONDS**

**THE FOLLOWING DISCUSSION OF CERTAIN U.S. FEDERAL INCOME CONSIDERATIONS IS FOR GENERAL INFORMATION ONLY AND IS NOT TAX ADVICE. EACH PROSPECTIVE INVESTOR SHOULD CONSULT ITS OWN TAX ADVISOR AS TO THE TAX CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF THE TAXABLE SERIES 2020C BONDS, INCLUDING THE EFFECT AND APPLICABILITY OF (I) U.S. FEDERAL, STATE, LOCAL OR FOREIGN TAX LAWS, (II) GIFT AND ESTATE TAX LAWS, AND (III) ANY INCOME TAX TREATY.**

### **General**

The following discussion summarizes certain material U.S. federal income tax considerations that may be relevant to the acquisition, ownership and disposition of the Taxable Series 2020C Bonds by an initial holder (as described below). This discussion is based upon the provisions of the Code, applicable U.S. Treasury Regulations promulgated thereunder, judicial authority and administrative interpretations, as of the date of this document, all of which are subject to change, possibly with retroactive effect, or are subject to different interpretations. Neither the City nor Bond Counsel offers any assurance that the Service will not challenge one or more of the tax consequences described in this discussion, and neither the City nor Bond Counsel has obtained, nor do the City or Bond Counsel intend to obtain, a ruling from the Service or an opinion of counsel with respect to the U.S. federal tax consequences of acquiring, holding or disposing of the Taxable Series 2020C Bonds.

This discussion is limited to holders who purchase the Taxable Series 2020C Bonds in this initial offering for a price equal to the issue price of the Taxable Series 2020C Bonds (*i.e.*, the first price at which a substantial amount of the Taxable Series 2020C Bonds is sold for cash other than to bondhouses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers, the “Issue Price”) and who hold the Taxable Series 2020C Bonds as capital assets (generally, property held for investment). This discussion does not address the tax considerations arising under the laws of any foreign, state, local or other jurisdiction or income tax treaties or any U.S. federal estate or gift tax considerations. In addition, this discussion does not address all tax considerations that may be important to a particular holder in light of the holder’s circumstances or to certain categories of investors that may be subject to special rules, such as certain U.S. expatriates, banks, REITs, RICs, insurance companies, tax-exempt organizations, dealers or traders in securities or currencies, partnerships, S corporations, estates and trusts, investors that hold their Taxable Series 2020C Bonds as part of a hedge, straddle or an integrated or conversion transaction, or investors whose “functional currency” is not the U.S. dollar. Furthermore, it does not address (i) alternative minimum tax consequences for individuals or (ii) the indirect effects on persons who

hold equity interests in a holder. This summary also does not consider the taxation of the Taxable Series 2020C Bonds under state, local or non-U.S. tax laws.

If a partnership (including an entity treated as a partnership for U.S. federal income tax purposes) holds the Taxable Series 2020C Bonds, the tax treatment of such partnership or a partner of such partnership generally will depend upon the status of the partner and the activities of the partnership. ***Partnerships acquiring Taxable Series 2020C Bonds and partners of partnerships acquiring the Taxable Series 2020C Bonds should consult their own tax advisors about the U.S. federal income tax consequences of acquiring, holding and disposing of the Taxable Series 2020C Bonds.***

### **Certain Tax Consequences to U.S. Bondholders**

As used herein “U.S. Bondholder” means a beneficial owner of a Taxable Series 2020C Bond that for U.S. federal income tax purposes is an individual citizen or resident of the United States, a corporation or other entity taxable as a corporation created or organized in or under the laws of the United States or any state thereof (including the District of Columbia), an estate the income of which is subject to U.S. federal income taxation regardless of its source or a trust where a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons (as defined in the Code) have the authority to control all substantial decisions of the trust (or a trust that has made a valid election under U.S. Treasury Regulations to be treated as a domestic trust).

#### ***Interest on the Taxable Series 2020C Bonds***

A U.S. Bondholder generally will be required to include as ordinary interest income any stated interest payments in income in accordance with its method of accounting for U.S. federal income tax purposes.

#### ***Premium***

If the Issue Price of the Taxable Series 2020C Bonds of any stated maturity is greater than its stated redemption price at maturity, such beneficial owner will be considered to have purchased such Taxable Series 2020C Bond with “amortizable bond premium” equal in amount to such excess. A beneficial owner may elect to amortize such premium using a constant yield method over the remaining term of such Taxable Series 2020C Bond and may offset interest otherwise required to be included in respect of such Taxable Series 2020C Bond during any taxable year by the amortized amount of such excess for the taxable year. Taxable Series 2020C Bond premium on such Taxable Series 2020C Bond held by a beneficial owner that does not make such an election will decrease the amount of gain or increase the amount of loss otherwise recognized on the sale, exchange, redemption or retirement of such Taxable Series 2020C Bond. However, if such Taxable Series 2020C Bond may be optionally redeemed after the beneficial owner acquires it at a price in excess of its stated redemption price at maturity, special rules would apply under the U.S. Treasury Regulations which could result in a deferral of the amortization of some Taxable Series 2020C Bond premium until later in the term of such Taxable Series 2020C Bond. Any election to amortize Taxable Series 2020C Bond premium applies to all taxable debt instruments held by the beneficial owner on or after the first day of the first taxable year to which such election applies and may be revoked only with the consent of the Service.

#### ***Disposition of the Taxable Series 2020C Bonds***

A U.S. Bondholder will generally recognize capital gain or loss on the sale, redemption, exchange, retirement or other taxable disposition of a Taxable Series 2020C Bond. This gain or loss will equal the difference between the U.S. Bondholder’s adjusted tax basis in the Taxable Series 2020C Bond and the amount realized (excluding any proceeds attributable to accrued but unpaid stated interest which will be recognized as ordinary interest income to the extent any such Bondholder has not previously included such amounts in income) by the Bondholder. A U.S. Bondholder’s adjusted tax basis in the Taxable Series 2020C Bonds will generally equal the amount the U.S. Bondholder paid for the Taxable Series 2020C Bonds increased by any original issue discount previously included in the Bondholder’s income and decreased by the amount of the Taxable Series 2020C Bond premium that has been previously amortized. The gain or loss generally will be long-term capital gain or loss if the Bondholder held the Taxable Series 2020C Bonds for more than one year at the time of the sale, redemption, exchange, retirement or other taxable disposition. Long-term capital gains of individuals, estates and trusts currently are subject to a reduced rate of U.S. federal income tax. The deductibility of capital losses is subject to certain limitations.

### ***Information Reporting and Backup Withholding***

Information reporting will apply to payments of principal and interest made by the City on, or the proceeds of the sale or other disposition of, the Taxable Series 2020C Bonds with respect to U.S. Bondholders (unless such holder is an exempt recipient such as a corporation), and backup withholding may apply unless the recipient of such payment provides the appropriate intermediary with a taxpayer identification number, certified under penalties of perjury, as well as certain other information or otherwise establishes an exemption from backup withholding. Backup withholding is not an additional tax. Any amount withheld under the backup withholding rules is allowable as a credit against the U.S. Bondholder's U.S. federal income tax liability, if any, and a refund may be obtained if the amounts withheld exceed the U.S. Bondholder's actual U.S. federal income tax liabilities provided the required information is timely provided to the Service.

### ***Additional Tax on Investment Income***

An additional 3.8% net investment income tax, or the "NIIT," is imposed on the "net investment income" of certain U.S. Bondholders who are individuals and on the undistributed "net investment income" of certain estates and trusts, to the extent the sum of net investment income and other modified adjusted gross income exceeds specified dollar amounts. Among other items, "net investment income" would generally include interest income and net gain from the disposition of property, such as the Taxable Series 2020C Bonds, less certain deductions. ***U.S. Bondholders should consult their tax advisors with respect to the tax consequences of the NIIT.***

### **Certain Tax Consequences to Non-U.S. Bondholders**

As used herein, a "non-U.S. Bondholder" means a beneficial owner of Taxable Series 2020C Bonds that is an individual, corporation, estate or trust that is not a U.S. Bondholder.

### ***Interest on the Taxable Series 2020C Bonds-Portfolio Interest***

Subject to the discussions below under the headings "—Information Reporting and Backup Withholding" and "Foreign Account Tax Compliance," payments to a non-U.S. Bondholder of interest on the Taxable Series 2020C Bonds generally will be exempt from withholding of U.S. federal tax under the "portfolio interest" exemption if the non-U.S. Bondholder properly certifies as to the non-U.S. Bondholder's foreign status as described below, and that:

- the non-U.S. Bondholder does not own, actually or constructively, 10% or more of the City's voting stock;
- the non-U.S. Bondholder is not a "controlled foreign corporation" for U.S. federal income tax purposes that is related to the City (actually or constructively); and
- the non-U.S. Bondholder is not a bank whose receipt of interest on the Taxable Series 2020C Bonds is in connection with an extension of credit made pursuant to a loan agreement entered into in the ordinary course of such Bondholder's trade or business.

The foregoing exemption from withholding tax will not apply unless (i) the non-U.S. Bondholder provides his, her or its name and address on an IRS Form W-8BEN or IRS Form W-8BEN-E (or successor form), and certifies under penalties of perjury, that such holder is not a U.S. person, (ii) a financial institution holding the Taxable Series 2020C Bonds on a non-U.S. Bondholder's behalf certifies, under penalties of perjury, that it has received an IRS Form W-8BEN or IRS Form W-8BEN-E (or successor form) from such holder and provides the Trustee with a copy, or (iii) the non-U.S. Bondholder holds their Taxable Series 2020C Bonds directly through a "qualified intermediary," and the qualified intermediary has sufficient information in its files indicating that such holder is not a U.S. Bondholder.

If a non-U.S. Bondholder cannot satisfy the requirements described above, payments of principal and interest made to such holder will be subject to the 30% U.S. federal withholding tax, unless such non-U.S. Bondholder provides the Trustee with a properly executed (a) IRS Form W-8BEN or IRS Form W-8-BEN-E or successor form claiming an exemption from or a reduction of withholding under an applicable tax treaty or (b) IRS Form W-8ECI (or successor form) stating that interest paid on the Taxable Series 2020C Bonds is not subject to withholding tax because it is effectively connected with such non-U.S. Bondholder's conduct of a trade or business in the United States.

If a non-U.S. Bondholder is engaged in an active trade or business in the United States and interest on the Taxable Series 2020C Bonds is effectively connected with the active conduct of that trade or business (and, in the case of an applicable income tax treaty, is attributable to a U.S. permanent establishment maintained by such holder), such non-U.S. Bondholder will be subject to U.S. federal income tax on the interest on a net income basis (although exempt from the 30% withholding tax) in the same manner as if such non-U.S. Bondholder were a U.S. person as defined under the Code. In addition, if a non-U.S. Bondholder is a foreign corporation, it may be subject to a branch profits tax equal to 30% (or lower applicable treaty rate) of such holder's earnings and profits for the taxable year, subject to certain adjustments, including earnings and profits from an investment in the Taxable Series 2020C Bonds, that is effectively connected with the active conduct by such non-U.S. Bondholder of a trade or business in the United States.

### ***Disposition of the Taxable Series 2020C Bonds***

Subject to the discussions below under the headings “—Information Reporting and Backup Withholding” and “Foreign Account Tax Compliance,” a non-U.S. Bondholder generally will not be subject to U.S. federal income tax on any gain realized on the sale, redemption, exchange, retirement or other taxable disposition of a Taxable Series 2020C Bonds unless:

- the gain is effectively connected with the conduct by the non-U.S. Bondholder of a U.S. trade or business (and, if required by an applicable income tax treaty, is treated as attributable to a permanent establishment maintained by the Bondholder in the United States);
- the non-U.S. Bondholder is a nonresident alien individual who has been present in the United States for 183 days or more in the taxable year of disposition and certain other requirements are met;
- the gain represents accrued interest, in which case the rules for taxation of interest would apply.

If a non-U.S. Bondholder is described in the first bullet point above, the non-U.S. Bondholder generally will be subject to U.S. federal income tax in the same manner as a U.S. Bondholder. If a non-U.S. Bondholder is described in the second bullet point above, the Bondholder generally will be subject to U.S. federal income tax at a flat rate of 30% or lower applicable treaty rate on the gain derived from the sale or other disposition, which may be offset by U.S. source capital losses.

### ***Information Reporting and Backup Withholding***

Payments to non-U.S. Bondholders of interest on their Taxable Series 2020C Bonds and any amounts withheld from such payments generally will be reported to the Service and such holder. Backup withholding will not apply to payments of principal and interest on the Taxable Series 2020C Bonds if the non-U.S. Bondholder certifies as to his, her or its non-U.S. Bondholder status on an IRS Form W-8BEN or IRS Form W-8BEN-E (or successor form) under penalties of perjury or such non-U.S. Bondholder otherwise qualifies for an exemption (provided that neither the City nor its agent, if any, know or have reason to know that such Bondholder is a U.S. person or that the conditions of any other exemptions are not in fact satisfied).

The payment of the proceeds of the disposition of Taxable Series 2020C Bonds to or through the U.S. office of a U.S. or foreign broker will be subject to information reporting and backup withholding unless a non-U.S. Bondholder provides the certification described above or such Bondholder otherwise qualifies for an exemption. Backup withholding is not an additional tax. Any amount withheld under the backup withholding rules is allowable as a credit against the non-U.S. Bondholder's U.S. federal income tax liability, if any, and a refund may be obtained if the amounts withheld exceed the non-U.S. Bondholder's actual U.S. federal income tax liabilities provided the required information is timely provided to the Service.

### **Foreign Account Tax Compliance**

Pursuant to the Foreign Account Tax Compliance Act (“FATCA”), withholding at a rate of 30% generally will be required in certain circumstances on payments of interest in respect of, and, after December 31, 2018, gross proceeds from the sale or other disposition (including payments of principal) of, Taxable Series 2020C Bonds held by or through certain foreign financial institutions (including investment funds) that do not qualify for an exemption from

these rules, unless the institution either (i) enters into, and complies with, an agreement with the Service to undertake certain diligence and to report, on an annual basis, information with respect to interests in, and accounts maintained by, the institution that are owned by certain U.S. persons and by certain non-U.S. entities that are wholly or partially owned by U.S. persons and to withhold 30% on certain payments, or (ii) if required under an intergovernmental agreement between the United States and an applicable foreign country, undertakes such diligence and reports such information to its local tax authority, which will exchange such information with the U.S. authorities. An intergovernmental agreement between the United States and an applicable foreign country, or future Treasury Regulations or other guidance, may modify these requirements. Accordingly, the entity through which the Taxable Series 2020C Bonds are held will affect the determination of whether such withholding is required. Similarly, in certain circumstances, payments of interest in respect of, and, after December 31, 2018, gross proceeds from the sale or other disposition of, Taxable Series 2020C Bonds held by or through a non-financial foreign entity that does not qualify under certain exemptions generally will be subject to withholding at a rate of 30%, unless such entity either (a) certifies that such entity does not have any “substantial United States owners” or (b) provides certain information regarding the entity’s “substantial United States owners,” which will be provided to the Service, as required. Prospective Bondholders should consult their tax advisors regarding the possible implications of these rules on their investment in the Taxable Series 2020C Bonds.

### **LEGAL INVESTMENTS AND ELIGIBILITY TO SECURE PUBLIC FUNDS IN TEXAS**

Under State law, the Series 2020 Bonds are legal and authorized investments for insurance companies, fiduciaries, trustees and sinking funds of municipalities or other political subdivisions or public agencies of the State. The Series 2020 Bonds are eligible to secure deposits of public funds of the State, its agencies or any political subdivision thereof to the extent of their market value. For political subdivisions or public agencies of Texas that have adopted investment policies and guidelines in accordance with the Public Funds Investment Act (Chapter 2256, Texas Government Code, as amended), the Series 2020 Bonds must be assigned a rating of not less than “A” or its equivalent as to investment quality by a nationally recognized rating agency in order to be eligible investments for such entity. See “RATINGS” herein. In addition, under State law, the Series 2020 Bonds are legal investments of state banks, savings banks, trust companies, and savings and loan associations.

The City has not reviewed the laws in other states to determine whether the Series 2020 Bonds are legal investments for various institutions in those states. The City has not made any investigation of any other laws, rules, regulations or investment criteria that affect the suitability of the Series 2020 Bonds for any of the above purposes or limit the authority of any of the above persons or entities to purchase or invest in the Series 2020 Bonds.

### **CONTINUING DISCLOSURE**

#### **General**

In the Ordinance, the City has made certain agreements regarding the continuing disclosure of information for the benefit of the holders and Beneficial Owners of the Series 2020 Bonds. The City is required to observe such agreements for so long as it remains obligated to advance funds to pay the Series 2020 Bonds. Under the agreements, the City will be obligated to provide certain updated financial information and operating data annually, and timely notice of specified events, whether or not material, to the information repository described below.

#### **Annual Reports**

The City will provide certain updated financial information and operating data to the Municipal Securities Rulemaking Board (the “MSRB”) annually. The information to be updated includes quantitative financial information and operating data with respect to the City’s Airport System contained in APPENDIX A and under the schedules listed in APPENDIX D. The City will update and provide this information within six months after the end of each fiscal year. See APPENDIX D relating to the City’s limited obligations to update Schedules 9, 9A, 9B and 9C, which contain actuarial information related to the pension plans.

The City may provide updated information in full text or in such other form consistent with the Ordinance, or may incorporate by reference certain other publicly available documents, as permitted by Securities and Exchange Commission Rule 15c2-12 (the “Rule”). The updated information will include audited financial statements if the City commissions an audit and it is completed by the required time. If audited financial statements are not provided by



that time, the City will provide audited financial statements when and if they become available, but if such audited financial statements are unavailable, the City will provide such financial statements on an unaudited basis within the required time. Any such financial statements will be prepared in accordance with the accounting principles described in APPENDIX A or such other accounting principles as the City may be required to employ from time to time pursuant to State law or regulation.

The City's current Fiscal Year end is June 30. Accordingly, it must provide updated information by December 31 in each year, unless the City changes its Fiscal Year. If the City changes its Fiscal Year, it will notify the MSRB of the change.

### **Notices of Certain Events**

The City will provide timely notice of certain events to the MSRB, not in excess of ten (10) Business Days after the occurrence of the event. Specifically, the City will provide notice of any of the following events with respect to the Series 2020 Bonds: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the IRS of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Series 2020 Bonds or other material events affecting the tax status of the Series 2020 Bonds; (7) modifications to rights of holders of the Series 2020 Bonds, if material; (8) bond calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Series 2020 Bonds, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership, or similar event of the City; (13) the consummation of a merger, consolidation, or acquisition involving the City or the sale of all or substantially all of the assets of the City, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; (14) the appointment of a successor or additional trustee or the change in the name of the trustee, if material; (15) incurrence of a financial obligation of the City, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City, any of which affect security holders, if material; and (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the City, any of which reflect financial difficulties. In addition, the City will provide to the MSRB, in a timely manner, notice of any failure by the City to provide the required annual financial information described above under "Annual Reports" and any notices of events specified in this section.

For these purposes, (A) any event described in clause (12) in the immediately preceding paragraph is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the City in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City, (B) as used in clauses (15) and (16) in the immediately preceding paragraph, "Financial Obligation" means a (i) debt obligation, (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation, or (iii) guarantee of a debt obligation or any such derivative instrument; provided that "Financial Obligation" shall not include municipal securities as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule, and (C) the City intends the words used in clauses (15) and (16) in the immediately preceding paragraph and the definition of Financial Obligation to have the meanings ascribed to them in SEC Release No. 34-83885 dated August 20, 2018.

### **Availability of Information**

The City has agreed to provide the foregoing information only to the MSRB. The information is expected to be available to holders of the Series 2020 Bonds from the MSRB through the EMMA website at [www.emma.msrb.org](http://www.emma.msrb.org); however, the City makes no representation regarding the availability of such information from the MSRB.

## **Limitations and Amendments**

The City has agreed to provide annual reports and notices of certain events only as described above. The City disclaims any contractual or tort liability for damages resulting in whole or in part from any breach of its agreement to provide annual reports or notices of certain events or from any statement made pursuant to its agreement, although holders of Series 2020 Bonds may seek a writ of mandamus to compel the City to comply with its agreement.

Except for the City's obligation to comply with the foregoing, the City has not agreed and does not intend to provide owners of the Series 2020 Bonds, subsequent to the issuance thereof, with continuing information about its finances, legal matters, ratings or any other information related to the City or the Series 2020 Bonds.

The City may amend its continuing disclosure agreement to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status or type of operations of the City, if the agreement, as amended, (1) would have permitted an underwriter to purchase or sell Series 2020 Bonds in the offering made hereby in compliance with the Rule, and (2) either the holders of a majority in aggregate principal amount of the outstanding Series 2020 Bonds consent, or nationally recognized bond counsel determines that the amendment will not materially impair the interests of the beneficial owners of the Series 2020 Bonds. The City may also amend or repeal its continuing disclosure agreement if the Securities and Exchange Commission amends or repeals the applicable provisions of the Rule or a court of final jurisdiction determines that such provisions are invalid, and the City may amend its continuing disclosure agreement in its discretion in any other circumstances or manner, but in either case only to the extent that its right to do so would not prevent an underwriter from lawfully purchasing or selling the Series 2020 Bonds in the offering described herein. If the City amends its continuing disclosure agreement, it must include with the next financial information and operating data provided in accordance with its agreement described above under "– Annual Reports" an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of information and data provided.

See APPENDIX D relating to the City's limited obligations to update Schedules 9, 9A, 9B and 9C, which contain actuarial information related to the pension plans

## **Compliance with Prior Undertakings**

On November 1, 2019, the City filed disclosures (the "Summarized Update") describing its compliance with its continuing disclosure undertakings during the previous five years, including certain filings with respect to the Houston Airport System Bonds, which disclosures are available by accessing the following link to EMMA (<https://emma.msrb.org/IssuerHomePage/Issuer?id=4DC16AA7A14478B8600650A121DC7042&type=G>) and locating the Summarized Update under the "Event-Based Disclosures" tab under the link "Other Event-based Disclosures: Summarized Update of Previous Disclosure Filings." The content of the Summarized Update is incorporated herein by reference.

## **No Continuing Disclosure Undertakings by Airlines**

No airline has made any agreement regarding the continuing disclosure of information for the benefit of the holders and Beneficial Owners of the Series 2020 Bonds. However, certain of the certificated major domestic airlines (or their respective parent corporations) are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended, and thus must file reports and other information with the Commission. See "THE AIRLINE INDUSTRY FINANCIAL INFORMATION." In addition, pursuant to the Rule, certain airlines may have agreed to continuing disclosure undertakings in connection with the issuance and sale of obligations other than the Series 2020 Bonds. In those instances, the airlines would have undertaken, in a written agreement or contract for the benefit of the holders of such obligations, to provide to various information repositories certain annual financial information and operating data, including audited financial statements, and to provide notice to such repositories and the MSRB of certain specified material events. Such information is available to securities brokers and others who subscribe to receive the information from such repositories.

## **LEGAL PROCEEDINGS**

The delivery of the Series 2020 Bonds is subject to receipt of the approving opinion of the Attorney General and the opinion of Co-Bond Counsel, Bracewell LLP, Houston, Texas, and West & Associates L.L.P., Houston, Texas,

as to the validity of the issuance of the Series 2020 Bonds under the Constitution and laws of the State and the opinion of Tax Counsel, Bracewell LLP, Houston, Texas, as to federal income tax matters. The opinions of Co-Bond Counsel and Tax Counsel will be based upon an examination of transcripts of certain proceedings relating to the issuance and authorization of the Series 2020 Bonds. Copies of the proposed opinions of Co-Bond Counsel and Tax Counsel to be issued in connection with the issuance of the Series 2020 Bonds are included in APPENDIX C to this Official Statement.

Co-Bond Counsel has reviewed the statements and information contained in the Official Statement under the captions and sub-captions “PURPOSE AND PLAN OF FINANCING – The Refunded Bonds” and “ – The Refunded Notes,” “THE SERIES 2020 BONDS,” “SECURITY FOR THE SERIES 2020 BONDS” (except for information under the sub-caption “Bondholders’ Remedies”), “COVENANTS AND TERMS OF THE ORDINANCE” (except for the information under the sub-caption “Rate Covenant – *Other Factors Impacting Rate Covenant*”), “CONTINUING DISCLOSURE” (except for the information under the sub-captions “Compliance With Prior Undertakings” and “No Continuing Disclosure Undertakings by Airlines,” as to which no opinion is expressed), and APPENDICES C-1 and C-2, solely to determine that such statements and information fairly and accurately describe the Series 2020 Bonds and the Ordinance; further, Co-Bond Counsel has reviewed the statements and information under the caption “LEGAL INVESTMENTS AND ELIGIBILITY TO SECURE PUBLIC FUNDS IN TEXAS” solely to determine whether such information fairly and accurately summarizes the law referred to therein. Tax Counsel has reviewed the statements and information under the caption “TAX MATTERS FOR THE TAX-EXEMPT BONDS” and “TAX MATTERS FOR THE TAXABLE BONDS” solely to determine whether such information fairly and accurately summarizes the law referred to therein and Tax Counsel is of the opinion that the statements and information contained therein are correct as to matters of law. Such firms have not, however, independently verified any of the factual information contained in this Official Statement nor have they conducted an investigation of the affairs of the City for the purpose of passing upon the accuracy or completeness of this Official Statement. No person is entitled to rely upon such firms’ limited participation as an assumption of responsibility for, or an expression of opinion of any kind with regard to, the accuracy or completeness of any of the information contained herein.

Certain matters will be passed on for the City by its Special Disclosure Co-Counsel, Haynes and Boone, LLP, Houston, Texas, and Law Offices of Francisco G. Medina, Houston, Texas. Certain other legal matters will be passed on for the Underwriters by their Co-Counsel, McCall, Parkhurst & Horton L.L.P., Houston, Texas, and Hardwick Law Firm, LLC, Houston, Texas.

The fees of Co-Bond Counsel, Tax Counsel, Special Disclosure Co-Counsel and Co-Underwriters’ Counsel for their services with respect to the Series 2020 Bonds are contingent upon the sale and delivery of the Series 2020 Bonds.

Bracewell LLP, West & Associates L.L.P., Haynes and Boone, LLP, and Law Offices of Francisco G. Medina, all of Houston, Texas, represent the Underwriters from time to time in matters unrelated to the issuance of the Series 2020 Bonds. McCall, Parkhurst & Horton L.L.P. and Hardwick Law Firm, LLC represent the City from time to time in matters unrelated to the issuance of the Series 2020 Bonds.

The various legal opinions to be delivered concurrently with the delivery of the Series 2020 Bonds express the professional judgment of the attorneys rendering the opinions as to the legal issues explicitly addressed therein. In rendering a legal opinion, the attorney does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or of the future performance of the parties to the transaction, nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

#### **CO-FINANCIAL ADVISORS**

Masterson Advisors LLC and The RSI Group LLC (the “Co-Financial Advisors”), are retained by the City as its independent financial advisors in connection with the issuance of the Series 2020 Bonds and, in such capacity, have assisted the City in the preparation of documents. The Co-Financial Advisors’ fee for services rendered with respect to the sale of the Series 2020 Bonds is not contingent upon the issuance and delivery of the Series 2020 Bonds.

Although the Co-Financial Advisors have read and participated in the preparation of this Official Statement, they have not independently verified any of the information set forth herein. The information contained in this Official Statement has been obtained primarily from the City’s records and from other sources that are believed to be reliable,

including financial records of the City and other entities that may be subject to interpretation. No guarantee is made as to the accuracy or completeness of any such information. No person, therefore, is entitled to rely upon the participation of the Co-Financial Advisors as an implicit or explicit expression of opinion as to the completeness and accuracy of the information contained in this Official Statement.

### **INDEPENDENT AUDITORS**

The financial statements of the Houston Airport System Fund, as of and for the years ended June 30, 2019 and 2018, included in this Official Statement as APPENDIX A, have been audited by McConnell & Jones LLP/Banks, Finley, White & Co., a Joint Venture Partnership known as M&J/BFW, independent auditors, as stated in their report appearing herein.

### **UNDERWRITING**

Morgan Stanley and Co. LLC, as representative of the Underwriters (the “Representative”), has agreed, subject to certain conditions, to purchase the Series 2020A Bonds at a price of \$151,175,433.50 (reflecting the par amount of the Series 2020A Bonds, plus an original issue premium of \$19,995,314.15, and less an underwriting discount of \$439,880.65). The Underwriters will be obligated to purchase all of the Series 2020A Bonds if any such Series 2020A Bonds are purchased. The Series 2020A Bonds to be offered to the public may be offered and sold to certain dealers (including the respective Underwriters and other dealers depositing Series 2020A Bonds into investment trusts) at prices lower than the public offering prices of such Series 2020A Bonds, and such public offering prices may be changed, from time to time, by the Underwriters. The City has also agreed to reimburse the Underwriters for certain expenses in connection with the offering.

The Representative has agreed, subject to certain conditions, to purchase the Series 2020B Bonds at a price of \$92,018,496.57 (reflecting the par amount of the Series 2020B Bonds, plus an original issue premium of \$20,660,649.95, and less an underwriting discount of \$207,153.38). The Underwriters will be obligated to purchase all of the Series 2020B Bonds if any such Series 2020B Bonds are purchased. The Series 2020B Bonds to be offered to the public may be offered and sold to certain dealers (including the respective Underwriters and other dealers depositing Series 2020B Bonds into investment trusts) at prices lower than the public offering prices of such Series 2020B Bonds, and such public offering prices may be changed, from time to time, by the Underwriters. The City has also agreed to reimburse the Underwriters for certain expenses in connection with the offering.

The Representative has agreed, subject to certain conditions, to purchase the Taxable Series 2020C Bonds at a price of \$658,542,231.91 (reflecting the par amount of the Taxable Series 2020C Bonds, less an underwriting discount of \$1,947,768.09). The Underwriters will be obligated to purchase all of the Taxable Series 2020C Bonds if any such Taxable Series 2020C Bonds are purchased. The Taxable Series 2020C Bonds to be offered to the public may be offered and sold to certain dealers (including the respective Underwriters and other dealers depositing Taxable Series 2020C Bonds into investment trusts) at prices lower than the public offering prices of such Taxable Series 2020C Bonds, and such public offering prices may be changed, from time to time, by the Underwriters. The City has also agreed to reimburse the Underwriters for certain expenses in connection with the offering.

The offering of the Series 2020 Bonds by the Underwriters is subject to receipt and acceptance and subject to the Underwriters’ right to reject any order in whole or in part.

The Series 2020 Bonds are a new issue of securities with no established trading market. The City has been advised by the Underwriters that they intend to make a market in the Series 2020 Bonds but are not obligated to do so and may discontinue market-making at any time without notice. No assurance can be given as to the liquidity of the trading market for the Series 2020 Bonds.

Certain of the Underwriters have entered into distribution agreements with other broker-dealers (that have not been designated by the City as Underwriters) for the distribution of the Series 2020 Bonds at the original issue prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers. See APPENDIX F – UNDERWRITER DISTRIBUTION AGREEMENTS.

The Underwriters and their respective affiliates are full-service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, municipal advisory, investment

management, asset management, investment research, 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 financial advisory and investment banking services for the City, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of the Houston Airport System, including the Series 2020 Bonds. The Underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold or recommend to clients that they acquire, long and/or short positions in such securities and instruments. The Underwriters and their respective affiliates may make a market in credit default swaps with respect to municipal securities in the future.

### **FORWARD-LOOKING STATEMENTS**

The statements contained in this Official Statement, and in any other information provided by the City, that are not purely historical are forward-looking statements, including statements regarding the City's expectations, hopes, intentions or strategies regarding the future. 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 the City on the date hereof, and the City assumes no obligation to update any such forward-looking statements. It is important to note that the City's actual results could differ materially from those in such forward-looking statements.

The forward-looking statements herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal and regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive, and market conditions and future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of the City. Any of such assumptions could be inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement would prove to be accurate.

### **GENERAL INFORMATION**

The descriptions herein of the Series 2020 Bonds and the Ordinance do not purport to be complete, and all such descriptions or references thereto are qualified in their entirety by reference to the complete form of the Ordinance. Statements made herein involving estimates or projections, whether or not expressly identified as such, should not be construed to be statements of fact or as representations that such estimates or projections will ever be attained or will approximate actual results. Any summaries or excerpts of constitutional provisions, statutes, ordinances or other documents do not purport to be complete statements of same and are made subject to all of the provisions thereof. Reference should be made to such original sources in all respects.

This Official Statement is not to be construed as a contract with the Underwriters or the holders of any of the Series 2020 Bonds.

Copies of the June 30, 2019 Comprehensive Annual Financial Report of the City of Houston, Texas are available to each of the prospective purchasers of the Series 2020 Bonds upon written request addressed to the office of the City Controller, P.O. Box 1562, Houston, Texas 77251. **HOWEVER, THE SERIES 2020 BONDS ARE PAYABLE SOLELY FROM NET REVENUES OF THE HOUSTON AIRPORT SYSTEM AND CERTAIN RESERVES ESTABLISHED PURSUANT TO THE ORDINANCE, AND NO IMPLICATION IS MADE THAT ANY OTHER REVENUES OR MONEY OF THE CITY ARE TO BE AVAILABLE FOR THE PAYMENT OF THE PRINCIPAL OF OR INTEREST ON THE SERIES 2020 BONDS.** Copies of the Ordinance are available to each of the prospective purchasers of the Series 2020 Bonds upon written request to the Office of the City Attorney, 900 Bagby, 4th Floor, Houston, Texas 77002. This document was approved by the City Council.

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**SCHEDULE I****SCHEDULE OF REFUNDED NOTES AND REFUNDED BONDS****Refunded Notes****City of Houston, Texas Commercial Paper Notes, Series A (AMT)**

\$150,973,000 City of Houston, Texas Airport System Senior Lien Commercial Paper Notes,  
Series A (AMT), maturing on or about the Date of Delivery

**2020B Refunded Bonds****City of Houston, Texas Airport System Subordinate Lien Revenue Refunding Bonds, Series 2010 (Non-AMT)**

<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Par Amount</b>	<b>Call Date</b>	<b>Call Price</b>	<b>CUSIP No.</b>
07/01/2030	Weekly Rate	\$91,905,000	10/20/2020	100%	4423484B1

**2020C Refunded Bonds****City of Houston, Texas Airport System Subordinate Lien Revenue Bonds, Series 2000B (Non-AMT)**

<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Par Amount</b>	<b>Call Date</b>	<b>Call Price</b>	<b>CUSIP No.</b>
07/01/2024 <sup>(a)</sup>	5.450%	\$ 6,200,000 <sup>(b)</sup>	--	--	442348J90

<sup>(a)</sup> Term Bond.

<sup>(b)</sup> Partial defeasance. Principal in the amount of \$38,315,000 to remain outstanding.

**City of Houston, Texas Airport System Subordinate Lien Revenue Refunding Bonds, Series 2011A (AMT)**

<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Par Amount</b>	<b>Call Date</b>	<b>Call Price</b>	<b>CUSIP No.</b>
07/01/2021	5.000%	\$ 12,000,000 <sup>(a)</sup>	--	--	4423484N5
07/01/2022	5.000	42,640,000	07/01/2021	100%	4423484P0
07/01/2023	5.000	15,250,000	07/01/2021	100	4423484Q8
07/01/2024	5.000	16,010,000	07/01/2021	100	4423484R6
07/01/2025	5.000	16,810,000	07/01/2021	100	4423484S4
07/01/2026	5.000	2,555,000	07/01/2021	100	4423484U9
		<u>\$105,265,000</u>			

<sup>(a)</sup> Partial defeasance. Principal in the amount of \$28,600,000 to remain outstanding.

**City of Houston, Texas Airport System Subordinate Lien Revenue Refunding Bonds, Series 2011B (Non-AMT)**

<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Par Amount</b>	<b>Call Date</b>	<b>Call Price</b>	<b>CUSIP No.</b>
07/01/2022	5.000%	\$ 1,630,000	07/01/2021	100%	4423485F1
07/01/2023	5.000	1,715,000	07/01/2021	100	4423485G9
07/01/2024	5.000	1,795,000	07/01/2021	100	4423485H7
07/01/2025	5.000	11,460,000	07/01/2021	100	4423485J3
07/01/2026	5.000	34,180,000	07/01/2021	100	4423485K0
		<u>\$ 50,780,000</u>			

**City of Houston, Texas Airport System Subordinate Lien Revenue Refunding Bonds, Series 2012A (AMT)**

<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Par Amount</b>	<b>Call Date</b>	<b>Call Price</b>	<b>CUSIP No.</b>
07/01/2023	5.000%	\$ 33,535,000	07/01/2022	100%	4423486B9
07/01/2024	5.000	35,220,000	07/01/2022	100	4423486C7
07/01/2025	5.000	27,875,000	07/01/2022	100	4423486D5
07/01/2026	5.000	8,195,000	07/01/2022	100	4423486E3
07/01/2027	5.000	11,150,000	07/01/2022	100	4423486F0
07/01/2028	5.000	11,720,000	07/01/2022	100	4423486G8
07/01/2029	5.000	9,880,000	07/01/2022	100	4423486H6
07/01/2030	5.000	10,375,000	07/01/2022	100	4423486J2
07/01/2031	5.000	56,495,000	07/01/2022	100	4423486K9
07/01/2032	5.000	40,735,000	07/01/2022	100	4423486L7
		<u>\$245,180,000</u>			

**City of Houston, Texas Airport System Subordinate Lien Revenue Refunding Bonds, Series 2012B (Non-AMT)**

<b>Maturity Date</b>	<b>Interest Rate</b>	<b>Par Amount</b>	<b>Call Date</b>	<b>Call Price</b>	<b>CUSIP No.</b>
07/01/2023	5.000%	\$ 5,085,000	07/01/2022	100%	4423486P8
07/01/2024	5.000	5,340,000	07/01/2022	100	4423486Q6
07/01/2025	5.000	5,610,000	07/01/2022	100	4423486R4
07/01/2026	5.000	5,885,000	07/01/2022	100	4423486S2
07/01/2027	5.000	40,075,000	07/01/2022	100	4423486T0
07/01/2028	5.000	42,090,000	07/01/2022	100	4423486U7
07/01/2029	5.000	6,825,000	07/01/2022	100	4423486V5
07/01/2030	5.000	7,165,000	07/01/2022	100	4423486W3
07/01/2031	5.000	55,805,000	07/01/2022	100	4423486X1
07/01/2032	5.000	33,480,000	07/01/2022	100	4423486Y9
		<u>\$207,360,000</u>			



**APPENDIX A**  
**AIRPORT SYSTEM FUND FINANCIAL STATEMENTS**

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# CAFR

COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal years ended June 30, 2019 and June 30, 2018

Prepared by Office of the City Controller, Chris Brown

THE AIRPORT SYSTEM FUND

An enterprise fund of the City of Houston, TX





**Airport System Fund**  
**An Enterprise Fund of the**  
**City of Houston, Texas**  
**Comprehensive Annual**  
**Financial Report**

Fiscal Years Ended June 30, 2019 and June 30, 2018

Prepared by:  
Office of City Controller

Chris Brown  
City Controller

Beverly Riggans  
Interim Deputy Director Controller



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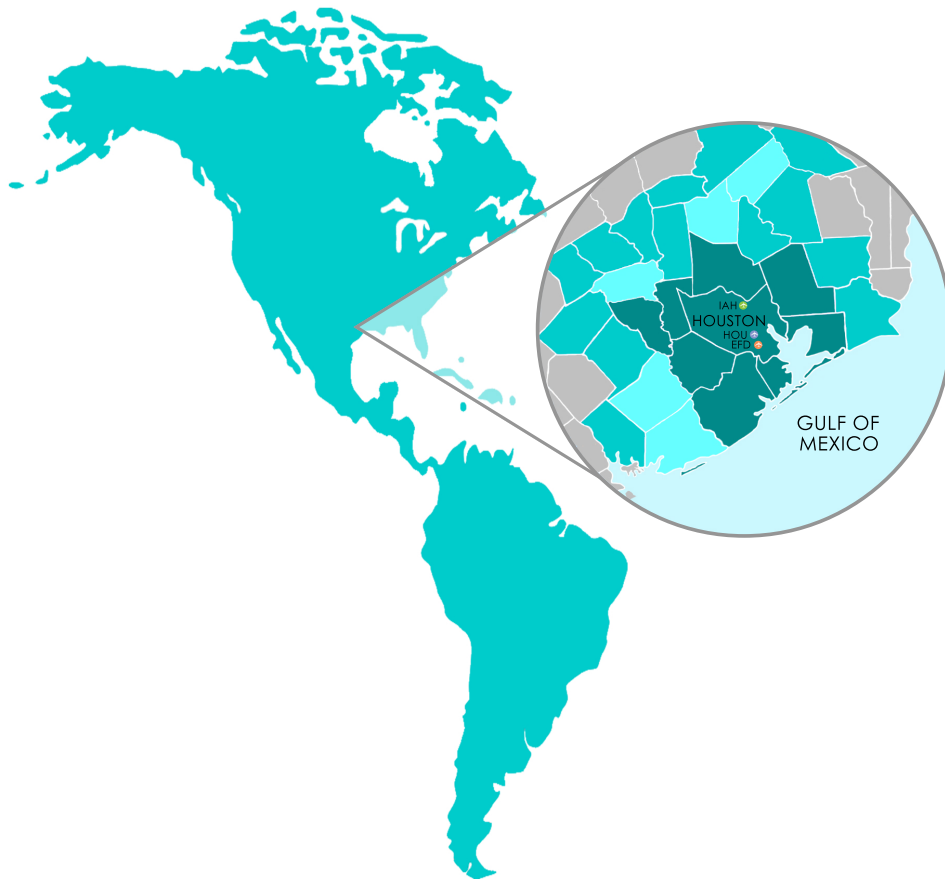
# INTRODUCTORY SECTION (Unaudited)


## COMPREHENSIVE ANNUAL FINANCIAL REPORT






# HOUSTON AIRPORT SYSTEM



 Metropolitan Statistical Area (MSA) of Houston-The Woodlands-Sugar Land, TX includes 9 counties.

 Consolidated Statistical Area (CSA) of Houston-The Woodlands, TX adds Matagorda, Trinity, Walker, Washington, and Wharton counties.



Government Finance Officers Association

**Certificate of  
Achievement  
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Presented to

**City of Houston, Texas  
Airport System Fund**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2018**

*Christopher P. Morill*

Executive Director/CEO

Office of the City Controller  
City of Houston, Texas



Chris B. Brown

November 29, 2019

To the Citizens, Mayor and Members of the City Council of the City of Houston, Texas:

I am pleased to present you with the Comprehensive Annual Financial Report (CAFR) for the City of Houston, Texas, Airport System Fund (the Fund) for the fiscal years ended June 30, 2019 and June 30, 2018, including the independent auditor's reports. The Controller's Office and the Houston Airport System share responsibility for both the accuracy of the data, and the completeness and fairness of the presentation, including all disclosures. 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 present fairly the financial position and results of operations of the Fund.

The CAFR includes four sections: Introductory, Financial, Statistical, and Compliance. The Introductory Section includes this transmittal letter, a list of principal officials, and the Fund's organizational chart. The Financial Section includes Management's Discussion and Analysis and financial statements with accompanying notes, as well as the independent auditor's report on the financial statements. The Statistical Section includes selected financial trends, revenue capacity, debt capacity, demographic, economic, and operating information, generally presented on a ten-year basis. The Compliance Section includes the independent auditor's report on HAS' compliance to the requirements of the Federal Aviation Administration's (FAA) Passenger Facility Charge Program.

The Financial Section described above is prepared in accordance with Generally Accepted Accounting Principles (GAAP) for governments as prescribed by the Governmental Accounting Standards Board (GASB). The Management's Discussion and Analysis offers readers an overview and analysis of the financial activities of the Fund and should be read as an introduction to the financial statements. In addition, the notes to the financial statements offer additional important information and are essential to a full understanding of the financial statements.

#### **The Reporting Entity and Its Services**

The Houston Airport System (HAS), under the administrative control of the Mayor, manages and operates the Fund. The City Controller, as the chief financial officer of the City of Houston (City), maintains the books of account, prepares financial statements, and, with the Mayor, co-signs all warrants, contracts, and orders for payment of any public funds or money relating to the Fund.

The Fund is an enterprise fund of the City and is included in the City's Comprehensive Annual Financial Report, which is a matter of public record. An enterprise fund is used to account for services provided to the general public on a continuing basis with costs recovered primarily through user charges. The City's Airport System includes the following: George Bush Intercontinental Airport (Intercontinental); William P. Hobby Airport (Hobby); and Ellington Airport. United Airlines is the dominant air carrier operating at Intercontinental and Southwest Airlines is the dominant air carrier operating at Hobby.

#### **Economic Conditions and Major Initiatives**

##### **Economic Conditions**

Houston is the nation's fourth most populous city and lies within the fifth largest metropolitan statistical area in the United States. The service region for the Houston Airport System, the nine county Houston-The Woodlands-Sugar Land Metropolitan Statistical Area, has a diverse economic base. Leading industries include energy, petrochemical, engineering and construction, real estate, aerospace, commerce, medicine and health care, transportation, biotechnology, and computer technology.

Widely recognized as the “Energy Capital of the World,” Houston is a global center for virtually every segment of the oil-and-gas industry. Houston is home to the Texas Medical Center, the world’s largest concentration of biomedical research and healthcare institutions, and to the Lyndon B. Johnson Space Center, NASA’s center for human spaceflight training, research, and flight control, and to related support firms specializing in aircraft and space vehicle manufacturing, research, and technology. The deepwater Port of Houston is the nation’s busiest port as ranked by foreign tonnage and the second-busiest port as ranked by total tonnage.

The Houston Airport System is comprised of three airports: George Bush Intercontinental (IAH), William P. Hobby (HOU) and Ellington (EFD). IAH is the nation’s 14<sup>th</sup> busiest airport (as measured by enplaned passengers in calendar year 2018) and is classified as a “large hub airport” by the FAA. IAH serves as an international gateway airport and a primary connecting point in the national air transportation system, and was the second busiest hub for United Airlines in calendar year 2018. Additionally, IAH is the primary air cargo airport for the region. HOU is the nation’s 35<sup>th</sup> busiest airport (as measured by enplaned passengers in calendar year 2018) and is classified as a “medium hub airport” by the FAA. HOU is a primary station for Southwest, which offers domestic service and international service to destinations in Mexico, Central America, and the Caribbean. EFD is currently used for general aviation, military, and NASA operations, but has no commercial passenger service. HAS obtained a spaceport license for EFD in June 2015 from the FAA, allowing EFD to accommodate horizontal-launch commercial spaceflight operations.

Key factors that will affect future airline traffic at the Houston Airport System include (1) the growth in the population and economy of the service region; (2) national and international economic and political conditions; (3) airline economics and airfares; (4) the price of aviation fuel; (5) airline service decisions; (6) the capacity of the air traffic control system; and (7) the capacity of the airports. During fiscal year 2019, HAS systemwide passenger growth increased 7.6% from fiscal year 2018, driven largely by an 8.2% increase at IAH. International passenger traffic for fiscal year 2019 was up 4.8% from fiscal year 2018, attributed to an increase in international service at IAH. International passenger traffic at HOU increased by only 0.9% from fiscal year 2018 due to Southwest’s discontinuing of service to Mexico City in March 2019. Fiscal year 2019 represented the fifth consecutive year in which IAH served more than 10 million international passengers (enplaned plus deplaned).

#### **Capital Improvement Program**

The Houston Airport System’s (HAS) five-year Capital Improvement Plan (CIP) for fiscal years 2020-2024 contains appropriation requirements of approximately \$2.1 billion, with 22% of the appropriations planned, as of June 30, 2019, for fiscal year 2020. This CIP was developed in connection with master planning studies for all three system airports. Future improvements will be funded with airport earnings, the remaining proceeds from prior bond issues, proceeds from new bond issues, proceeds from the FAA and other grantors, and with passenger facility charges. The CIP excludes projects funded by airline tenants under the terms of special facilities leases. HAS continually reviews and updates its CIP to address changing economic conditions such as air traffic demand levels, changing operating conditions, and facility conditions.

At IAH, HAS is proceeding with the planning and procurement of design and construction support for the IAH Terminal Redevelopment Program (ITRP). This program includes the newly constructed 11-gate concourse just west of the existing Terminal C North (becoming the “New Terminal C North”) and reconstructing and integrating the existing Terminal C North and Terminal D into a new single common-use international facility (the Mickey Leland International Terminal (MLIT)) and the construction of a new centralized ticketing hall. The expansion of the terminal facilities will also necessitate an enlargement of certain components of the existing Federal Inspection Services (FIS) facility as well as related improvements to aircraft parking aprons and roadways. The terminal and ticketing hall will be used by United Airlines and all foreign-flag airlines serving IAH.

The City awarded contracts for executive program manager and program management support services in fiscal year 2015 and architectural/engineering and construction management contracts for the MLIT in fiscal year 2017. In fiscal year 2018, the City began the selection process for architectural/engineering and construction management firms for the FIS and those contracts were awarded in fiscal year 2019. Additionally, the design/build contract for the associated Landside Utility Enabling project was also awarded this year.

At HOU, capital improvements are planned for the airfield as required by the FAA, as well as normal pavement management, and customer service enhancements for the HOU Central Concourse. Additionally, certain drainage and roadway improvement projects are scheduled to take place in fiscal year 2020.

At EFD, construction of a new state-of-the-art air traffic control tower was completed in fiscal year 2019. A design/build contract was awarded in fiscal year 2019 for Phase I of Spaceport development that will construct the necessary roadways and utilities for future tenants. Ground-breaking of Phase I was held on June 26, 2019.

As Houston Airport System continues to review its CIP for changes necessary to "right size" its facilities and to accommodate the growth in passenger volume at its airports, management has committed to financial targets intended to optimize use of resources and to expand facilities in a financially responsible manner. More specifically, financial targets set for fiscal years 2020-2024 include the following:

FINANCIAL METRIC	TARGET	FY19 ACTUAL
Total Debt per Enplaned Passenger*	\$120 or Less	\$66.62
Debt Service Coverage Ratio (Net of PFC Offset)	1.5 or Greater	1.67 times
Days of Cash On-Hand	450 or Greater	545 days

\*Note – Total Debt excludes special facility debt.

### Financial Information

#### Accounting Systems and Budgetary Controls

The Fund's financial accounting system utilizes an accrual basis of accounting. Internal accounting controls are an integral part of the Fund's accounting system and are designed to provide reasonable, but not absolute, assurance that assets are safeguarded from unauthorized use or disposition. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived, and the valuation of costs and benefits requires estimates and judgments by management.

The Houston Airport System controls current expenses at all division levels. The Fund's Deputy Directors are responsible for the expenses approved by the Division Managers reporting to them; in turn, Division Managers are responsible for budgetary items that are controllable at their organizational level. Budgetary control is maintained at the expenditure category, e.g., Personnel Services, Supplies, Other Services and Capital Outlay, through the encumbrance of estimated purchase amounts prior to the release of purchase orders or contracts to the vendors. This is accomplished primarily through an automated encumbrance and accounts payable system.

The Fund as a whole is not budgeted. The City Council approves the Fund's annual budget for operational expenses. City Council authorizes capital project expenditures through individual appropriation ordinances based on a five-year CIP that is proposed by the Mayor and the Houston Airport System Director, and approved by City Council. City Council can legally appropriate only those amounts of money that the City Controller has certified to be available for appropriation.

### Other Information

#### Independent Audit

An independent certified public accounting firm audits the financial statements of the Fund each year. McConnell & Jones, LLP and Banks, Finley, White & Co. formed a joint venture to perform the fiscal year 2019 and 2018 audits. The financial section of this report includes the independent auditor's report on the basic financial statements. The compliance section of this report includes the independent auditor's report on HAS' compliance, and internal control over compliance, with the Passenger Facility Charge Program instituted by the Federal Aviation Administration.

The City is required to undergo an annual Single Audit in conformity with the provisions of the Single Audit Act, Title 2 of the US Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, and the State of Texas Single Audit Circular. These audits are conducted simultaneously with the Fund's annual financial statement audit. Information related to these Single Audits, including the schedules of financial assistance, findings and recommendations, is included in separate Single Audit Reports.

**Awards/Acknowledgments**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the City of Houston, Texas, Airport System Fund for its comprehensive annual financial report submitted for the fiscal year that ended June 30, 2018. This was the 25th consecutive year that the Airport System Fund has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe our current report continues to conform to the Certificate of Achievement program requirements, and we are submitting it to GFOA to determine its eligibility for another certificate.

The preparation of this comprehensive annual financial report was made possible by the dedicated service of the Finance Division of the Houston Airport System and the City Controller's Office.

Respectfully submitted,



Chris B. Brown

City Controller



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CITY OF HOUSTON, TEXAS

AIRPORT SYSTEM FUND

INTRODUCTORY SECTION  
LIST OF PRINCIPAL OFFICIALS

CITY OF HOUSTON

ELECTED OFFICIALS AS OF JUNE 30, 2019:



Left to Right: Mike Knox, Karla Cisneros, Jack Christie, Mike Laster, Jerry Davis, Dave Martin, Ellen Cohen, Martha Castex-Tatum, Sylvester Turner, Dwight Boykins, Chris Brown, Robert Gallegos, Brenda Stardig, Steve Le, David Robinson, Amanda Edwards, Michael Kubosh, Greg Travis.  
*Photo credit: Daniel Schein*

INTRODUCTORY SECTION

Mayor	Sylvester Turner
Controller	Chris Brown
Councilmember, At-Large, Position 1	Mike Knox
Councilmember, At-Large, Position 2	David Robinson
Councilmember, At-Large, Position 3	Michael Kubosh
Councilmember, At-Large, Position 4	Amanda Edwards
Councilmember, At-Large, Position 5	Jack Christie
Councilmember, District A	Brenda Stardig
Councilmember, District B	Jerry Davis
Councilmember, District C	Ellen Cohen
Councilmember, District D	Dwight Boykins
Councilmember, District E	Dave Martin
Councilmember, District F	Steve Le
Councilmember, District G	Greg Travis
Councilmember, District H	Karla Cisneros
Councilmember, District I	Robert Gallegos
Councilmember, District J	Mike Laster
Councilmember, District K	Martha Castex-Tatum

INTRODUCTORY SECTION  
LIST OF PRINCIPAL OFFICIALS

HOUSTON AIRPORT SYSTEM (A department of the City of Houston)

AS OF JUNE 30, 2019:

**Mario C. Diaz**  
Director of Aviation

*In alphabetical order:*

	<b>Saba Abashawl</b> Chief External Affairs Officer		<b>Tanya Acevedo</b> Chief Technology Officer
	<b>Robert "Bob" Barker</b> Chief Development Officer		<b>J'Maine Chubb</b> Chief Financial Officer
	<b>Harleen Hines Smith</b> Chief Human Resources Officer		<b>Arturo Machuca</b> General Manager <i>Ellington Airport</i>
	<b>Liliana Rambo</b> General Manager <i>William P. Hobby Airport</i>		<b>Jesus H. Saenz Jr.</b> Chief Operating Officer
	<b>Ian Wadsworth</b> Chief Commercial Officer		<b>Kelly Woodward</b> Interim General Manager <i>George Bush Intercontinental Airport</i>

## INTRODUCTORY SECTION

## AWARDS, ACCOLADES AND RECOGNITIONS

## Houston is the only city in the Western Hemisphere and the 3<sup>rd</sup> city in the World with two 4-star rated airports

George Bush Intercontinental Airport and William P. Hobby Airport were each awarded a 4-star rating at the 2019 Skytrax World Airport Awards



## World's Best Website and Digital Services

George Bush Intercontinental Airport won World's Best Website and Digital Services at the 2019 Skytrax World Airport Awards

### ***In addition, the Houston Airports received the following awards:***

George Bush Intercontinental Airport ranked in 5<sup>th</sup> place for Best Airport Dining Experience

George Bush Intercontinental Airport ranked in 5<sup>th</sup> place for Best Airports in North America

William P. Hobby Airport ranked in 9<sup>th</sup> place for Best Airports with 10 to 20 million passengers (the only airport in the United States listed in this category)

William P. Hobby Airport ranked in 6<sup>th</sup> place for Best Regional Airports in North America

## GOVERNMENT FINANCE OFFICERS ASSOCIATION



The City of Houston Airport System Fund was awarded the Certificate of Achievement for Excellence in Financial Reporting for the 25<sup>th</sup> consecutive year for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2018

## INTRODUCTORY SECTION


## AWARDS, ACCOLADES AND RECOGNITIONS



### J.D. POWER

George Bush Intercontinental Airport ranked in 7<sup>th</sup> place in the Mega Airport category for the 2018 North America Airport Satisfaction study

William P. Hobby Airport ranked in 10<sup>th</sup> place in the Large Airport category for the 2018 North America Airport Satisfaction study



### OAG PUNCTUALITY LEAGUE REPORT

George Bush Intercontinental Airport ranked in 6<sup>th</sup> place for on-time arrivals and departures in 2018 among major airports in the world



### AIRPORT EXPERIENCE NEWS AWARDS

The Houston Airports were both honored with *Best Customer Service* recognition in 2018. George Bush Intercontinental Airport was named the winner in the Large Airports category, while William P. Hobby Airport was named the winner in the Medium/Small Airports category

### CONDE NAST TRAVELER 2018 READERS' CHOICE AWARDS

George Bush Intercontinental Airport ranked in the top 10 for its recent transformations, including enhanced dining and shopping options, plus an attention to details like available charging stations and fast, free Wi-Fi

### THE TRAZEEES AWARDS

George Bush Intercontinental Airport remains a favorite among millennial travelers and has been voted a *Trazees Winner* as a Top 5 airport in North America for millennials for the 2<sup>nd</sup> time

INTRODUCTORY SECTION  
SNAPSHOT OF THE HOUSTON AIRPORTS

INTRODUCTORY SECTION

**148,393** sq ft

CONCESSION SPACE



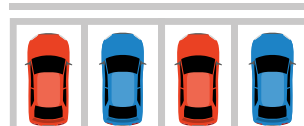
**786**

DAILY DEPARTURES\*

\*AVG Flights



**30,002**



PUBLIC PARKING SPACES

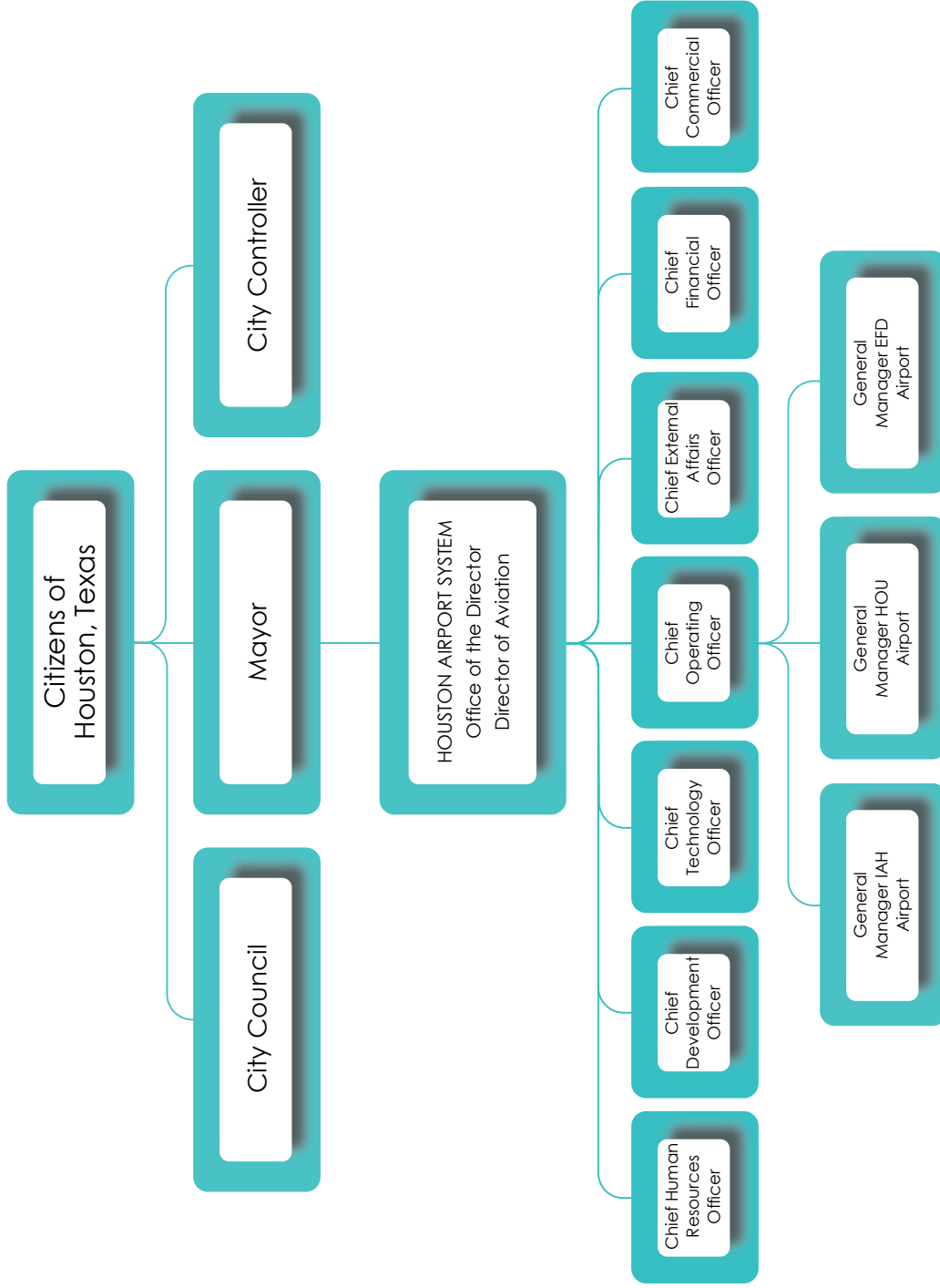
INTRODUCTORY SECTION  
SNAPSHOT OF THE HOUSTON AIRPORTS



\*MKT



INTRODUCTORY SECTION

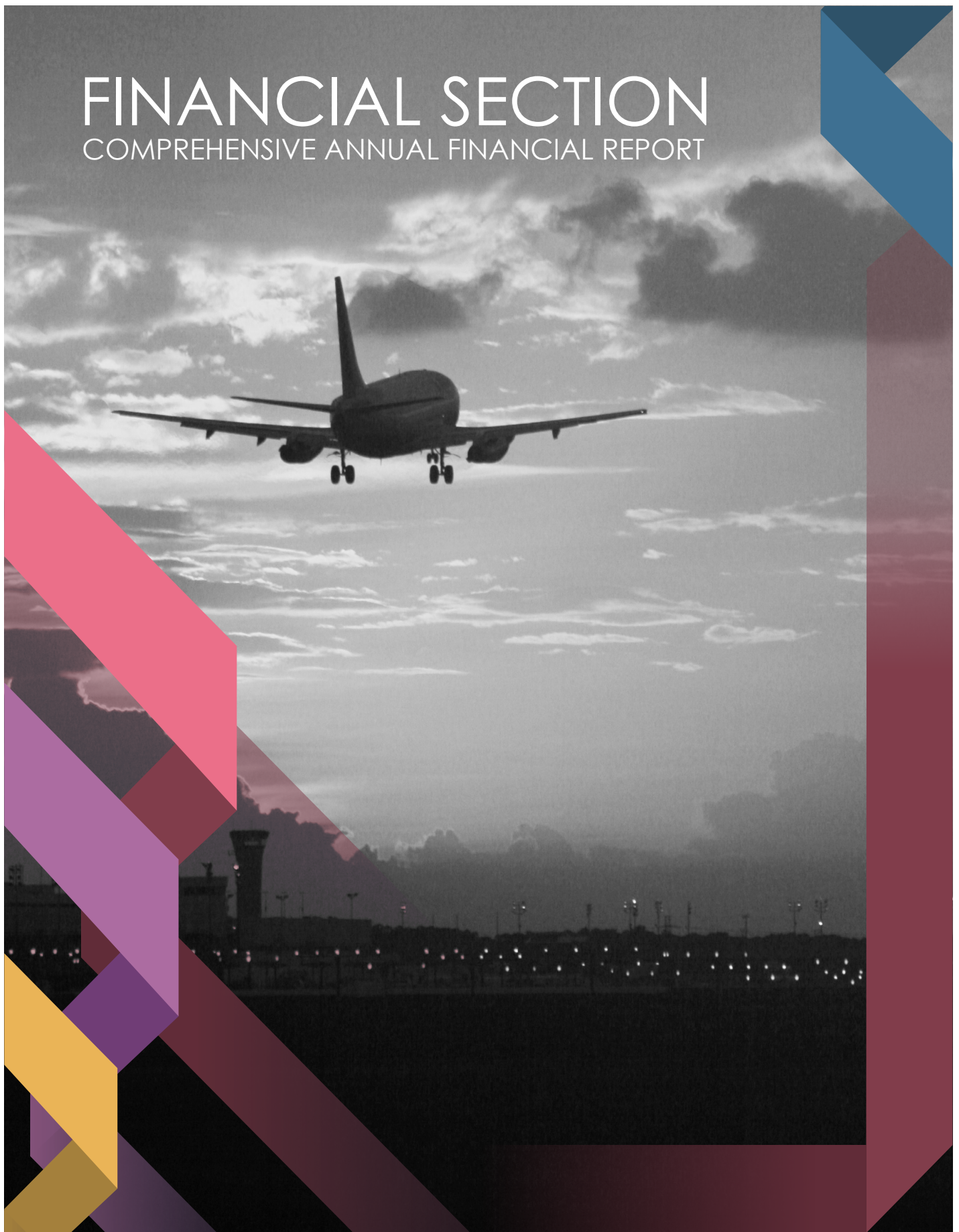


Houston Airport System • For fiscal years ended June 30, 2019 and 2018



# FINANCIAL SECTION

COMPREHENSIVE ANNUAL FINANCIAL REPORT





## Independent Auditors' Report

To the Honorable Mayor,  
Members of City Council, and City Controller  
City of Houston, Texas

### Report on the Financial Statements

We have audited the accompanying financial statements of the Airport System Fund (the "Fund") of the City of Houston, Texas (the "City"), which comprise the statement of net position as of June 30, 2019 and 2018 the related statements of revenues, expenses and changes in net position and cash flows for the years then ended, and the related notes to the financial statements.

### 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.

### Auditors' Responsibility

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

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 in 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.

## **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the net position of the Airport System Fund of the City of Houston, Texas, as of June 30, 2019 and 2018 the changes in net position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## **Emphasis of Matters**

As discussed in Note 1, the financial statement presents only the Airport System Fund and do not purport to and do not, present fairly the net position of the City of Houston, Texas as of June 30, 2019 and 2018, the changes in its net position or, where applicable, its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our opinion is not modified with respect to this matter.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis (pages 4 through 11) and the Pension System Supplementary Information and Other Post-Employment Benefits Supplementary Information (page 52 through 54) be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Fund's basic financial statements. The Introductory Section, the Statistical Section and Compliance Section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Passenger Facility Charge Revenues and Disbursements Schedule and accompanying notes on pages 77 to 81 are the responsibility of management and were derived from, and relate directly to, the underlying accounting and other records used to prepare the financial statements.



The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information to the underlying and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, based on our audit and the procedures performed as describe above, the above-mentioned schedule is fairly stated in all material respects in relation to the financial statements as a whole.

The Introductory Section and the Statistical Section 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.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated December 17, 2019, on our consideration of the City of Houston, Texas's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City of Houston, Texas's internal control over financial reporting and compliance.

McConnell & Jones LLP Banks, Finley, White & Co.

December 17, 2019

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

Management of the Airport System Fund (Fund) offers readers of the Fund's financial statements this overview and analysis of the financial activities for the fiscal years ended June 30, 2019 and June 30, 2018. Please read the Management's Discussion and Analysis (unaudited) in conjunction with the financial statements and the notes to the financial statements, which follow this section. All amounts, unless otherwise indicated, are in thousands of dollars.

**Financial Highlights**

The Fund's net position increased \$92.7 million or 6.2% during fiscal year 2019 and increased \$31.7 million or 2.2% during fiscal year 2018.

In fiscal year 2019, operating income decreased \$13.0 million or 4,432.1%. In fiscal year 2018, operating income decreased \$55.7 million or 100.5%. In fiscal year 2019 operating revenues declined \$12.4 million while operating expenses climbed \$0.6 million. Landing fees and ground rentals were down \$16.9 million partially due to rates and charges adjustments of \$7.4 million with the airlines, while parking, concession and other fees increased \$4.5 million for the year. In fiscal year 2018, operating revenues increased \$16.8 million while operating expenses increased \$72.5 million as a result of vast pension cost reductions recognized in the prior year associated with pension reform.

Maintenance and operating expenses increased \$2.4 million or 0.7% in fiscal year 2019 and increased \$80.6 million or 31.7% in fiscal year 2018. Depreciation expense decreased \$1.8 million or 1.0% in fiscal year 2019 and decreased \$8.2 million or 4.4% in fiscal year 2018.

Investment income increased \$36.5 million or 424.6% in fiscal year 2019 and increased \$5.2 million or 152.5% in fiscal year 2018.

In fiscal year 2018, the Fund implemented GASB No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions." The cumulative effect of the implementation added a deficit of \$(21.3) million to the unrestricted net position as of July 1, 2017. Beginning in fiscal year 2018, the Airport System set its rates and charges to recover this deficit over thirty years. See Notes 1 and 7 for more information.

The Fund implemented Governmental Accounting Standards Board (GASB) Statement No. 68 at the start of fiscal year 2015, to record a net pension liability based not on the City's legal funding requirement, but on an actuarial calculation of total pension liability less the fiduciary net position of the Houston Municipal Employee Pension System (HMEPS). This resulted in unrestricted net position deficits of \$(178.0) million as of June 30, 2015 and 2016. The unrestricted net position as of June 30, 2017 was improved to \$(126.9) million due to cost savings included in pension reforms implemented by the City. See Notes 1 and 6 for more information.

**Overview of the Financial Statements**

This discussion and analysis is an introduction to the Fund's financial statements. The Airport System Fund's CAFR consists of the following components: management's discussion and analysis, the financial statements, the notes to the financial statements, and required supplementary information. The notes are essential to a full understanding of the financial statements. A statistical section is included for further analysis.

A fund is a group of related accounts used to maintain control over resources that have been segregated for specific activities or objectives. An enterprise fund is used to account for a business-like activity within a government. The Airport System Fund is an enterprise fund of the City of Houston, thus included in the City of Houston's Comprehensive Annual Financial Report (CAFR). The Houston Airport System (HAS) consists of George Bush Intercontinental Airport (IAH), William P. Hobby Airport (HOU), and Ellington Airport (EFD), and is managed and operated as a department of the City.

The statement of net position presents information on the Fund's assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference between these sections reported as net position. Changes in net position from year to year may serve as useful indicators of whether the financial position of the Airport System Fund is improving or deteriorating.

The statement of revenues, expenses and changes in net position presents information showing how the Fund's net position changed during the two most recent fiscal years. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

The statement of cash flows reports how much cash was provided by or used by the Fund's operations, investing activities, non-capital financing activities, and capital and related financing activities.

The financial statements include note disclosures that explain some of the information in the financial statements and provide more details. In addition to the financial statements and accompanying notes, this report also presents certain required supplementary information concerning the City's progress in funding its obligations to provide pension and other post-employment benefits.

**Net Position**

Total net position at June 30, 2019 was \$1,598.3 million, a 6.2% increase from June 30, 2018. Total net position at June 30, 2018 was \$1,505.5 million, a 2.2% increase from June 30, 2017.

**NET POSITION**  
**JUNE 30, 2019, JUNE 30, 2018, and JUNE 30, 2017**  
**(in thousands)**

	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
<b>Assets</b>			
Current assets	\$ 498,385	\$ 480,903	\$ 452,246
Noncurrent assets	1,016,240	963,092	892,490
Net capital assets	<u>2,765,308</u>	<u>2,816,044</u>	<u>2,883,432</u>
Total assets	<u>4,279,933</u>	<u>4,260,039</u>	<u>4,228,168</u>
Deferred outflows of resources	<u>37,388</u>	<u>51,334</u>	<u>81,177</u>
<b>Liabilities</b>			
Current liabilities	216,428	243,095	218,419
Long term liabilities	<u>2,470,516</u>	<u>2,551,512</u>	<u>2,612,622</u>
Total liabilities	<u>2,686,944</u>	<u>2,794,607</u>	<u>2,831,041</u>
Deferred inflows of resources	<u>32,121</u>	<u>11,253</u>	<u>4,487</u>
<b>Net Position</b>			
Net investment in capital assets	542,125	531,232	542,363
Restricted net position	1,194,487	1,117,578	1,058,392
Unrestricted (deficit)	<u>(138,356)</u>	<u>(143,297)</u>	<u>(126,938)</u>
Total net position	<u>\$ 1,598,256</u>	<u>\$ 1,505,513</u>	<u>\$ 1,473,817</u>

More than a third of the Fund's total net position (33.9% in fiscal year 2019; 35.3% in fiscal year 2018) reflects net investment in capital assets (e.g., land, buildings, runways, equipment and infrastructure) less any related outstanding debt used to acquire those assets. The Fund uses these capital assets to operate the airports; consequently, these assets are not available for future spending. Although the Fund's investment in its capital assets is reported net of any related debt, it should be noted that the resources needed to repay this debt must be provided by airport revenue or other sources procured by the Fund, since the capital assets cannot be used to liquidate these liabilities.

The other portions of the Fund's net position represent resources that are restricted, and the unrestricted deficit. The restricted resources (74.7% in fiscal year 2019; 74.2% in fiscal year 2018) are subjected to external restrictions on how they may be used. Most of these restrictions are due to covenants made to the holders of the Fund's revenue bonds within ordinances passed by City Council. These covenants further require that any positive unrestricted net position carried in cash and cash equivalents at the end of the fiscal year be restricted for future capital improvements. The unrestricted (deficit) net position was \$(138.4 million) as of June 30, 2019 and was \$(143.3 million) as of June 30, 2018.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

## Changes in Net Position

From July 1, 2018 to June 30, 2019, net position of the Airport System Fund increased \$92.7 million or 6.2%.  
From July 1, 2017 to June 30, 2018, net position of the Airport System Fund increased \$31.7 million or 2.2%.

**CHANGES IN NET POSITION**  
**YEARS ENDED JUNE 30, 2019, JUNE 30, 2018, and JUNE 30, 2017**  
**(in thousands)**

	June 30, 2019	June 30, 2018	June 30, 2017
Operating revenues	\$ 498,464	\$ 510,864	\$ 494,041
Operating expenses	511,743	511,157	438,662
Operating income (loss)	(13,279)	(293)	55,379
Nonoperating revenues	174,001	133,566	124,738
Nonoperating expenses	84,578	94,061	87,574
Nonoperating income (loss)	89,423	39,505	37,164
Revenues over expenses	76,144	39,212	92,543
Capital contributions	16,599	13,784	35,513
Change in net position	92,743	52,996	128,056
Beginning net position as previously reported	1,505,513	1,473,817	1,345,761
Cumulative effect of implementation of new accounting principle	-	(21,300)	-
Total net position, July 1	1,505,513	1,452,517	1,345,761
Total net position, June 30	\$ 1,598,256	\$ 1,505,513	\$ 1,473,817

Operating revenues decreased \$12.4 million or 2.4% for fiscal year 2019 and increased \$16.8 million or 3.4% for fiscal year 2018. In fiscal year 2019, the total enplaned and deplaned (IAH and HOU) passenger volume increased 5.0% whereas in 2018 the total enplaned and deplaned (IAH and HOU) passenger volume increased 1.0%. In 2019 at IAH, there was a 1.9% rate decrease in landing fees from \$2.757 to \$2.704 per 1,000 pounds, compared to the year 2018 4.0% rate increase in landing fees from \$2.642 to \$2.757. In 2019 at HOU, there was a 7.7% rate decrease in landing fees from \$2.013 to \$1.857 per 1,000 pounds, compared to the year 2018 1.6% rate increase in landing fees from \$1.982 to \$2.013.

In addition, the fiscal 2019 parking rates increased 9.1% from \$22 to \$24, following fiscal year 2018's 20% increase from \$20 to \$22. Rental revenues fell 4.0% in 2019 although concessions increased 2.5%. In year 2018, rentals increased 2.4%, while concessions gained 4.1%. Detailed passenger statistics and comparative rates and charges can be found in the statistical section of this CAFR.

Capital contributions are grant awards that are primarily related to reimbursements for expenses from construction projects. Amounts received from Federal Aviation Administration (FAA) discretionary, FAA entitlement and Transportation Security Administration (TSA) grants fluctuate year-to-year because of timing differences between the date of the award and the date of construction completion. In fiscal year 2019, capital contributions increased \$2.8 million or 20.4% and in fiscal year 2018, capital contributions decreased \$21.7 million or 61.2%.

In fiscal year 2019, nonoperating revenues increased \$40.3 million or 30.2% due to a \$36.5 million increase in investment income, a \$2.1 million increase in Passenger Facility Charge (PFC) revenue, and a \$65 thousand increase in Customer Facility Charge (CFC) revenue. In fiscal year 2018, nonoperating revenues increased \$8.8 million or 7.1% due to a \$5.2 million increase in investment income, a \$7.5 million increase in PFC revenue, and a \$3.2 million increase in CFC revenue, partially offset by an unfavorable \$5.0 million prior years' cumulative rates and charges adjustment.

Investment income increased \$36.5 million or 424.6% in fiscal year 2019, and in fiscal year 2018 increased \$5.2 million or 152.5%. The increase in both years is primarily due to higher interest earnings on treasury investments.



## CITY OF HOUSTON, TEXAS

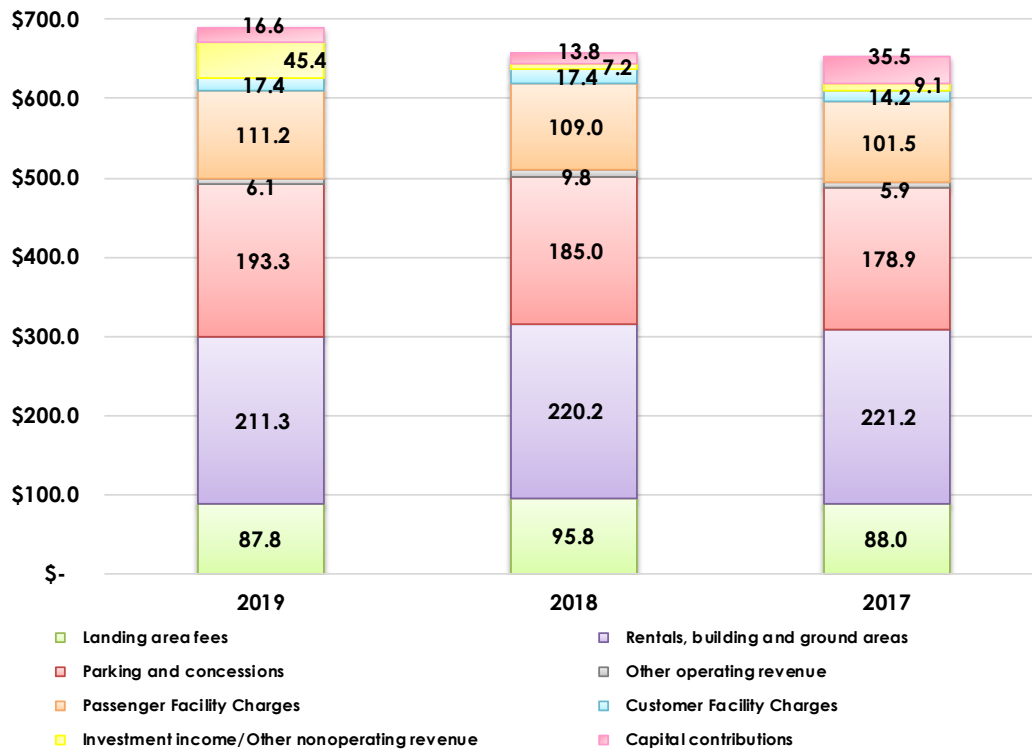
## AIRPORT SYSTEM FUND

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

**TOTAL REVENUES AND CAPITAL CONTRIBUTION**  
**YEARS ENDED JUNE 30, 2019, JUNE 30, 2018, and JUNE 30, 2017**  
(in thousands)

	June 30, 2019	June 30, 2018	June 30, 2017
Operating revenue:			
Landing area fees	\$ 87,767	\$ 95,779	\$ 88,046
Rentals, building and ground areas	211,323	220,214	221,181
Parking and concessions	193,251	185,035	178,888
Other operating revenue	6,123	9,836	5,926
Nonoperating revenue:			
Passenger Facility Charges	111,155	109,021	101,539
Customer Facility Charges	17,439	17,374	14,200
Investment income (loss)	45,067	8,591	3,403
Other nonoperating revenue	340	(1,420)	5,596
Total revenues	<u>672,465</u>	<u>644,430</u>	<u>618,779</u>
Capital contributions	<u>16,599</u>	<u>13,784</u>	<u>35,513</u>
Total revenues and capital contributions	<u>\$ 689,064</u>	<u>\$ 658,214</u>	<u>\$ 654,292</u>

**TOTAL REVENUES and CAPITAL CONTRIBUTION**  
(in millions)



In fiscal year 2019, total operating expenses increased \$0.6 million or 0.1%; maintenance and operating expenses increased \$2.4 million or 0.7%, and depreciation expense decreased \$1.8 million or 1.0%. In fiscal year 2018, total operating expenses increased \$72.5 million or 16.5%; maintenance and operating expenses increased \$80.6 million or 31.7%, and depreciation expense decreased \$8.2 million or 4.4%. The fiscal year 2018 fluctuation in maintenance and operating expenses was due primarily to pension reform efforts of the City of Houston which were recognized in 2017, lowering expenses dramatically in that year.

## CITY OF HOUSTON, TEXAS

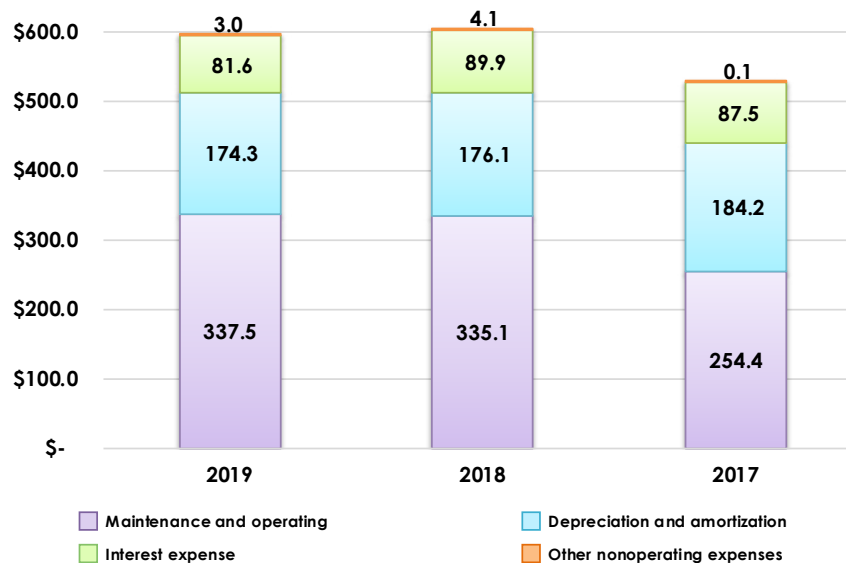
## AIRPORT SYSTEM FUND

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

**TOTAL EXPENSES**  
**YEARS ENDED JUNE 30, 2019, JUNE 30, 2018, and JUNE 30, 2017**  
(in thousands)

	June 30, 2019	June 30, 2018	June 30, 2017
Operating expenses:			
Maintenance and operating	\$ 337,477	\$ 335,104	\$ 254,459
Depreciation and amortization	174,266	176,053	184,203
Interest expense	81,575	89,944	87,482
Other nonoperating expenses	3,003	4,117	92
Total expenses	<u>\$ 596,321</u>	<u>\$ 605,218</u>	<u>\$ 526,236</u>

**TOTAL EXPENSES**  
(in millions)



In fiscal year 2019, interest expense decreased \$8.4 million or 9.3%. Interest expense increased \$2.5 million or 2.8% in fiscal year 2018.

The Airport System Fund's investment in capital assets (net of accumulated depreciation and amortization) amounts to \$2.77 billion at June 30, 2019, a decrease of \$50.7 million or 1.8% from June 30, 2018. Capital assets at June 30, 2018 were \$2.82 billion, a decrease of \$67.4 million or 2.3%, from June 30, 2017. See Note 3 for further information.

At IAH, HAS is proceeding with the planning and procurement of design and construction support for the IAH Terminal Redevelopment Program (ITRP) that includes the newly constructed 11-gate concourse just west of the existing Terminal C North (becoming the "New Terminal C North"), and with the reconstruction and integration of the existing Terminal C North and Terminal D into a new single common-use international facility (the Mickey Leland International Terminal (MLIT)) and a new centralized ticketing hall.

CITY OF HOUSTON, TEXAS

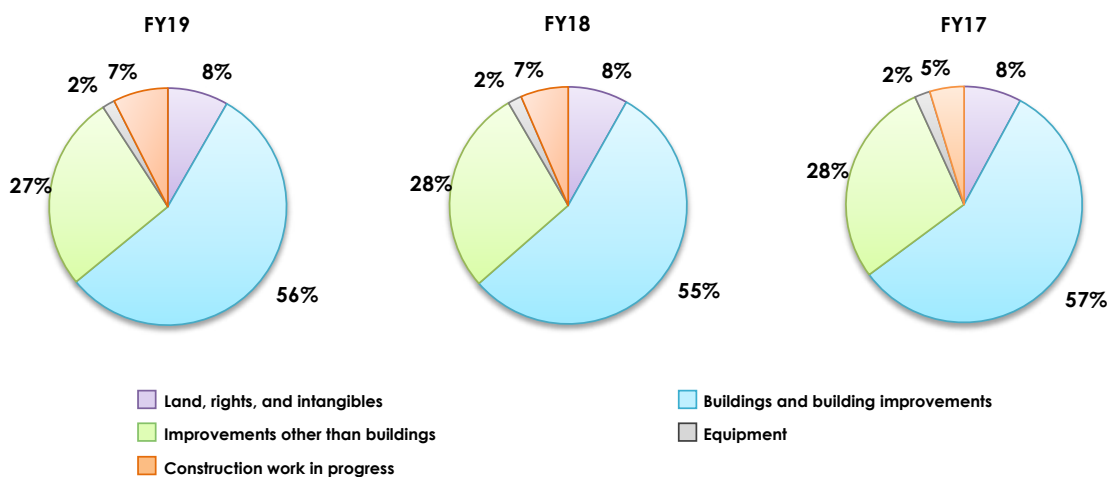
AIRPORT SYSTEM FUND

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

Capital Assets

**CAPITAL ASSETS**  
**JUNE 30, 2019, JUNE 30, 2018, and JUNE 30, 2017**  
**(Net of Depreciation and Amortization)**  
**(in thousands)**

	<u>June 30, 2019</u>	<u>June 30, 2018</u>	<u>June 30, 2017</u>
Land	\$ 216,100	\$ 216,107	\$ 216,079
Rights and intangibles	12,926	13,607	11,528
Buildings and building improvements	1,542,612	1,560,127	1,642,234
Improvements other than buildings	739,766	789,944	817,193
Equipment	47,217	53,415	61,165
Construction work in progress	206,687	182,844	135,233
	<u>\$ 2,765,307</u>	<u>\$ 2,816,044</u>	<u>\$ 2,883,432</u>



This capacity expansion of the IAH terminal includes enlargement of the existing Federal Inspection Services (FIS) facility as well as related improvements to aircraft parking aprons and roadways. The terminal and ticketing hall will be used by United Airlines and all foreign-flag airlines serving IAH. Taxiway reconstruction is ongoing in fiscal 2019 and beyond for taxiway projects WA Phase 1 and WB Phase 2.

At HOU, capital improvements are planned for the airfield as required by the FAA, as well as pavement management and customer service enhancements for the HOU Central Concourse. Additionally, certain drainage and roadway improvement projects are taking place in fiscal year 2019. A new project to erect a 2,200 square foot building and parking lot for parking operations personnel was started this year.

At EFD, construction of a new state-of-the-art air traffic control tower was completed in fiscal year 2019. A design/build contract was awarded in fiscal year 2019 for Phase 1 of Spaceport development that will construct the necessary roadways and utilities for future tenants. Ground-breaking of Phase 1 was held on June 26, 2019.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

## Debt

At the end of this fiscal year, the Airport System Fund has total debt of \$2.2 billion, which represents outstanding subordinate lien revenue bonds net of unamortized discounts and premiums, and senior lien commercial paper, both secured solely by Airport System Fund revenues. In addition, the Fund is responsible for \$2.0 million of taxable general obligation pension bonds and \$82.4 million of special facility revenue bonds (consolidated rental car facility). At the end of fiscal year 2018, the Fund had total debt of \$2.3 billion. See Note 5 for further information.

Total outstanding debt decreased \$88.6 million or 3.8% during fiscal year 2019. \$655.3 million in debt was added with the issuance of Airport System Subordinate Lien Revenue and Refunding Bonds, Series 2018C and Series

**OUTSTANDING DEBT**  
**JUNE 30, 2019, JUNE 30, 2018, AND JUNE 30, 2017**  
(in thousands)

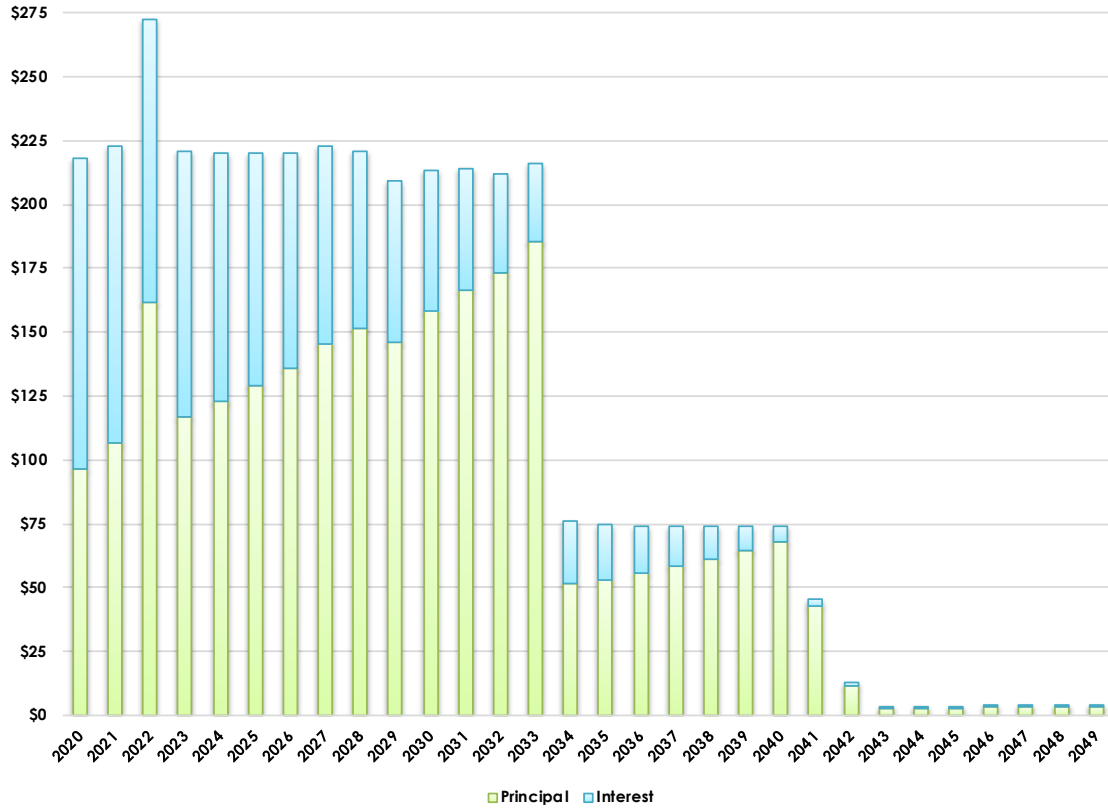
	June 30, 2019	June 30, 2018	June 30, 2017
<b>Senior lien debt:</b>			
Current maturities-revenue bonds	\$ -	\$ 10,735	\$ 10,225
Long-term revenue bonds payable	-	409,685	420,420
Unamortized discounts and premium	-	(359)	(476)
Commercial paper	48,473	21,473	87,000
Total senior lien debt	<u>48,473</u>	<u>441,534</u>	<u>517,169</u>
<b>Subordinate lien debt:</b>			
Current maturities-revenue bonds	80,110	67,785	67,630
Long-term revenue bonds payable	1,855,340	1,598,790	1,512,135
Unamortized discounts and premium	179,252	110,299	59,061
Total subordinate lien debt	<u>2,114,702</u>	<u>1,776,874</u>	<u>1,638,826</u>
<b>Inferior lien debt:</b>			
Current maturities-contract	-	-	6,240
Long-term contract payable	-	-	-
Total inferior lien debt	<u>-</u>	<u>-</u>	<u>6,240</u>
<b>Other debt:</b>			
Current maturities-note payable	-	-	5,018
Long-term note payable	-	-	110,403
Pension obligation bonds			
Current maturities	-	27,610	-
Long-term payable	2,006	2,006	2,006
Special facility revenue bonds			
Consolidated rental car facility:			
Current maturities	5,960	5,715	5,490
Long-term payable	74,425	80,385	86,100
Total other debt	<u>82,391</u>	<u>115,716</u>	<u>209,017</u>
Total outstanding debt	<u>\$ 2,245,566</u>	<u>\$ 2,334,124</u>	<u>\$ 2,371,252</u>
<b>Deferred outflows of resources:</b>			
Unamortized costs of refunding debt	<u>\$ (19,572)</u>	<u>\$ (20,499)</u>	<u>\$ (27,329)</u>

2018D, while \$651.6 million in senior lien fixed rate bonds and subordinate lien auction rate bonds were currently refunded from the proceeds. \$27.0 million in new commercial paper was issued. \$27.6 million in taxable pension obligation bonds, \$89.6 million in subordinate lien bonds, and \$5.7 million in special facility revenue bonds matured and were paid. \$17.3 million in premiums, net of discounts, were amortized. During fiscal year 2018, total outstanding debt decreased \$37.1 million or 1.6% due to the retirement of existing debt and the issuance of Airport System Revenue and Refunding Bonds, Series 2018A and Series 2018B.

MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

Debt Service Requirements to Maturity  
(in millions)

The graph below represents the required principal and interest payments on outstanding debt through fiscal year 2049.



The underlying ratings of the Airport System Fund's obligations for fiscal year 2019:

	Senior Lien	Subordinate Lien	Consolidated Rental Car SFRB
Fitch's Bond Rating:	Not Rated	A	A-
Moody's Bond Rating:	Aa3	A1	A3
Standard & Poor's Bond Rating:	AA-	A+	A

Requests for Information

This financial report is designed to provide a general overview of the City of Houston, Texas Airport System Fund's finances for all of those with an interest. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Office of the City Controller, 901 Bagby Street, 8th Floor, P.O. Box 1562, Houston, Texas 77251-1562.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

STATEMENTS OF NET POSITION (in thousands)  
JUNE 30, 2019 AND 2018

	2019	2018
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 144,076	\$ 134,358
Investments	290,965	259,813
Restricted cash and cash equivalents	5,593	6,125
Restricted accounts receivable	1,494	1,444
Accounts receivable (net of allowance for doubtful accounts of \$1,110 in 2019 and \$1,723 in 2018)	30,758	50,114
Due from City of Houston	486	276
Inventory	1,739	1,881
Prepays	4,882	4,495
Due from other governments - grants receivable	18,392	22,397
Total current assets	<u>498,385</u>	<u>480,903</u>
Noncurrent assets		
Investments	971,015	924,410
Restricted cash and cash equivalents	45,030	37,753
Prepays	195	929
Capital assets		
Land	216,100	216,107
Rights and intangibles	17,471	17,376
Buildings, improvements and equipment	5,532,746	5,435,669
Construction in progress	206,687	182,844
Total capital assets	<u>5,973,004</u>	<u>5,851,996</u>
Less accumulated depreciation and amortization	<u>(3,207,696)</u>	<u>(3,035,952)</u>
Net capital assets	<u>2,765,308</u>	<u>2,816,044</u>
Total noncurrent assets	<u>3,781,548</u>	<u>3,779,136</u>
<b>Total assets</b>	<u>4,279,933</u>	<u>4,260,039</u>
<b>Deferred Outflows of Resources</b>		
Deferred outflows from debt refunding	19,572	20,499
Deferred outflows from pensions	17,720	30,835
Deferred outflows from OPEB LTD	96	-
<b>Total deferred outflows of resources</b>	<u>\$ 37,388</u>	<u>\$ 51,334</u>

(continued)

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

STATEMENTS OF NET POSITION (in thousands)  
JUNE 30, 2019 AND 2018

	2019	2018
<b>Liabilities</b>		
Current Liabilities		
Accounts payable	\$ 15,575	\$ 16,774
Cost of issuance payable	-	180
Accrued payroll liabilities	3,166	3,026
Due to City of Houston	247	394
Due to other governments	571	1,800
Advances and deposits	2,439	2,176
Unearned revenue	4,347	10,837
Claims for workers' compensation	904	881
Compensated absences	6,120	6,127
Revenue bonds payable	80,110	78,520
Special facility revenue bonds payable	5,960	5,715
Pension obligation bonds payable	-	27,610
Accrued interest payable	49,339	43,464
Contracts and retainages payable	46,518	35,591
Other current liabilities	1,132	10,000
Total current liabilities	<u>216,428</u>	<u>243,095</u>
Noncurrent liabilities		
Revenue bonds payable, net	2,034,592	2,118,415
Special facility revenue bonds payable	74,425	80,385
Commercial paper payable	48,473	21,473
Pension obligation bonds payable	2,006	2,006
Claims for workers' compensation	902	1,395
Compensated absences	6,489	6,932
Net pension liability payable	229,757	230,999
Other post employment benefits	73,286	89,450
Other post employment benefits - LTD	586	457
Total noncurrent liabilities	<u>2,470,516</u>	<u>2,551,512</u>
<b>Total liabilities</b>	<u>2,686,944</u>	<u>2,794,607</u>
<b>Deferred Inflows of Resources</b>		
Deferred inflows from pensions	5,800	1,100
Deferred inflows from OPEB health benefits	26,321	10,147
Deferred inflows from OPEB LTD	-	6
<b>Total deferred inflows of resources</b>	<u>32,121</u>	<u>11,253</u>
<b>Net position</b>		
Net investment in capital assets	542,125	531,232
Restricted net position		
Restricted for debt service	428,856	357,588
Restricted for maintenance and operations	60,525	56,891
Restricted for special facility	43,442	36,049
Restricted for renewal and replacement	10,000	10,000
Restricted for capital improvements	651,664	657,050
Unrestricted (deficit)	<u>(138,356)</u>	<u>(143,297)</u>
<b>Total net position</b>	<u>\$ 1,598,256</u>	<u>\$ 1,505,513</u>

The accompanying notes are an integral part of the financial statements.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

STATEMENTS OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION (in thousands)  
FOR YEARS ENDED JUNE 30, 2019 AND 2018

	<u>2019</u>	<u>2018</u>
<b>Operating Revenues</b>		
Landing area fees	\$ 87,767	\$ 95,779
Rentals, building and ground area	211,323	220,214
Parking	110,136	103,961
Concessions	83,115	81,074
Other	6,123	9,836
Total operating revenues	<u>498,464</u>	<u>510,864</u>
<b>Operating Expenses</b>		
Maintenance and operating	337,477	335,104
Depreciation and amortization	174,266	176,053
Total operating expenses	<u>511,743</u>	<u>511,157</u>
<b>Operating income (loss)</b>	<u>(13,279)</u>	<u>(293)</u>
<b>Nonoperating revenues (expenses)</b>		
Investment income (loss)	45,067	8,591
Interest expense	(81,575)	(89,944)
Gain / (Loss) on disposal of assets	119	(176)
Passenger Facility Charges	111,155	109,021
Customer Facility Charges	17,439	17,374
Special facility cost	(43)	(294)
Cost of issuance for debt	(2,960)	(3,647)
Other revenue (expense)	221	(1,420)
Total nonoperating revenues (expenses)	<u>89,423</u>	<u>39,505</u>
Income/(loss) before capital contributions	76,144	39,212
Capital contributions	16,599	13,784
Change in net position	<u>92,743</u>	<u>52,996</u>
Beginning net position as previously reported	1,505,513	1,473,817
Cumulative effect of implementation of new accounting principle		(21,300)
Total net position, July 1	<u>1,505,513</u>	<u>1,452,517</u>
<b>Total net position, June 30</b>	<u>\$ 1,598,256</u>	<u>\$ 1,505,513</u>

The accompanying notes are an integral part of the financial statements.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

STATEMENTS OF CASHFLOWS (in thousands)  
FOR YEARS ENDED JUNE 30, 2019 AND 2018

	<u>2019</u>	<u>2018</u>
<b>Cash flows from operating activities</b>		
Receipts from customers	\$ 511,854	\$ 509,538
Payments to employees	(103,091)	(131,160)
Payments to suppliers	(145,518)	(127,244)
Payments to the City of Houston	(71,263)	(67,604)
Claims paid	(904)	(881)
Other receipts (payments)	221	(1,420)
Net cash provided by operating activities	<u>191,299</u>	<u>181,229</u>
<b>Cash flows from investing activities</b>		
Sale of investments	1,754,930	1,711,524
Purchase of investments	(1,832,687)	(1,851,068)
Investment income (loss)	45,067	8,591
Net cash (used for) provided by investing activities	<u>(32,690)</u>	<u>(130,953)</u>
<b>Cash flows from noncapital financing activities</b>		
Issuance of pension obligation bonds	-	27,610
Retirement of pension obligation bonds	(27,610)	-
Interest expense for pension obligation bonds	(715)	(223)
Cost of issuance expense for pension obligation bonds	-	(102)
Net cash (used for) provided by noncapital financing activities	<u>(28,325)</u>	<u>27,285</u>
<b>Cash flows from capital and related financing activities</b>		
Proceeds from issuance of revenue bonds	653,881	475,472
Retirement of revenue bonds	(719,586)	(336,809)
Interest expense on debt	(97,352)	(103,296)
Retirement of note payable	-	(115,882)
Proceeds from issuance of commercial paper	27,000	18,000
Retirement of commercial paper	-	(83,527)
Retirement of inferior lien contract	-	(6,240)
Retirement of special facility bonds	(5,715)	(5,490)
Cost of issuance expense for revenue bonds	(3,140)	(3,365)
Passenger Facility Charges	110,892	108,220
Customer Facility Charges	17,388	17,232
Grant receipts	19,377	27,680
Acquisition of capital assets	(116,566)	(106,263)
Net cash (used for) capital and related financing activities	<u>(113,821)</u>	<u>(114,268)</u>
Net increase (decrease) in cash and cash equivalents	16,463	(36,707)
Cash and cash equivalents, beginning of year	<u>178,236</u>	<u>214,943</u>
<b>Cash and cash equivalents, end of the year</b>	<u>\$ 194,699</u>	<u>\$ 178,236</u>
Current cash and cash equivalents	\$ 144,076	\$ 134,358
Current restricted cash and cash equivalents	5,593	6,125
Noncurrent restricted cash and cash equivalents	<u>45,030</u>	<u>37,753</u>
<b>Cash and cash equivalents, end of the year</b>	<u>\$ 194,699</u>	<u>\$ 178,236</u>

(continued)

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

STATEMENTS OF CASHFLOWS (in thousands)  
FOR YEARS ENDED JUNE 30, 2019 AND 2018

	<u>2019</u>	<u>2018</u>
<b>Reconciliation of operating income (loss) to net cash provided by operating activities</b>		
Operating income (loss)	\$ (13,279)	\$ (293)
Adjustments to reconcile operating income (loss) to net cash provided by operating activities		
Terminal space revenue-note payable	-	(461)
Depreciation	174,266	176,053
Capital improvement plan expense	11,541	7,027
Other receipts (payments)	221	(1,420)
Changes in assets and liabilities		
Accounts receivable	19,619	(6,388)
Due from the City of Houston	(210)	(75)
Inventory and prepaids	(246)	(1,563)
Accounts payable	(1,199)	1,881
Accrued payroll liabilities	140	(341)
Other current liabilities	(8,868)	-
Due to the City of Houston	(147)	(319)
Advances and deposits	(6,227)	5,525
Other post-employment benefits and deferred amounts	36	4,103
Pension related payables and deferred amounts	16,572	(3,795)
Claims for workers' compensation	(470)	857
Compensated absences	(450)	438
<b>Net cash provided by operating activities</b>	<u>\$ 191,299</u>	<u>\$ 181,229</u>
<b>Noncash transactions</b>		
Capitalized interest expense	\$ 7,500	\$ 8,832
Capital additions included in note payable	-	(115,882)
Capital additions included in other liabilities	10,927	1,069
Grants included in receivables	(4,198)	(13,895)
Bond amortization expense	14,868	3,438
Gain (loss) on disposal of assets	220	(183)
<b>Noncash transactions</b>	<u>\$ 29,317</u>	<u>\$ (116,621)</u>

The accompanying notes are an integral part of the financial statements.

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## NOTES TO THE FINANCIAL STATEMENTS

1. **Summary of Significant Accounting Policies****Reporting Entity**

The Airport System Fund (Fund), an enterprise fund of the City of Houston (City), is responsible for the operations, maintenance, and development of the City's Airport System. The Airport System consists of the George Bush Intercontinental Airport (Intercontinental), William P. Hobby Airport (Hobby) and Ellington Airport.

The Mayor and City Council members serve as the governing body that oversees operation of the Fund. The Fund is operated by the Houston Airport System as a self-sufficient enterprise and is administered by the Houston Airport System Director, who reports to the City's Mayor.

The Fund is not financially accountable for any other operations, and accordingly, is accounted for as a single major enterprise fund. The Fund is included in the City's Comprehensive Annual Financial Report, which is a matter of public record.

**Basis of Accounting**

The City accounts for the Fund as a proprietary fund. Proprietary funds are used to account for operations that are financed and operated in a manner similar to private business enterprises where the intent of the City is that the cost of operations, including depreciation, be financed or recovered through user charges. The Fund is accounted for on a cost of services or "economic resources" measurement focus using the accrual basis of accounting, under which revenues are recognized in the accounting period in which they are earned and the related expenses are recorded in the accounting period incurred, if measurable. All assets and liabilities, current, noncurrent and capital in addition to deferred outflows are included on the statement of net position.

The financial statements presented in this report conform to the reporting requirements of the Governmental Accounting Standards Board (GASB) which establishes combined statements as the required level for governmental entities that present financial statements in accordance with generally accepted accounting principles. The Fund defines operating revenues as receipts from customers and other receipts that do not result from transactions defined as capital and related financing, non-capital financing, or investing activities. All other revenue is recognized as non-operating. The Fund defines operating expenses as personnel and supply costs, utilities and other charges for service, the purchase of furniture and equipment with a value of less than \$5,000, and other expenses that do not result from transactions defined as capital or related financing, non-capital financing, or investing activities. All other expense is recognized as non-operating.

In November 2016, the GASB issued Statement No. 83, "Certain Asset Retirement Obligations." This statement will enhance comparability of financial statements among governments by establishing uniform criteria for governments to recognize and measure certain ARO's, including obligations that may not have been previously reported. The requirements of this statements are effective for financial statements for periods beginning after June 15, 2018 (fiscal year 2019). The City and the Fund have determined that GASB No. 83 is not applicable to our CAFR.

In January 2017, the GASB issued Statement No. 84, "Fiduciary Activities." This statement will enhance consistency and comparability by establishing specific criteria for identifying activities that should be reported as fiduciary activities and clarifying whether and how business-type activities should report their fiduciary activities. The requirements of this statement are effective for financial statements for periods beginning after December 15, 2018 (fiscal year 2020). The City and the Fund are evaluating the impact, if any, upon its financial position, results of operations or cash flows upon adoption.

In June 2017, the GASB issued Statement No. 87, "Leases." This statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. The requirements of this statement are effective for financial statements for periods beginning after December 15, 2019. (FY2021) The City and the Fund are evaluating the impact, if any, upon its financial position, results of operations or cash flows upon adoption.

## NOTES TO THE FINANCIAL STATEMENTS

**1. Summary of Significant Accounting Policies, continued:**

In March 2018, the GASB issued Statement No. 88, "Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements." This statement will improve the information that is disclosed in notes of governmental financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. The requirements of this statement are effective for reporting periods beginning after June 15, 2018 (fiscal year 2019). The City and the Fund have implemented GASB No. 88 as in this annual report.

In June 2018, the GASB issued Statement No. 89, "Accounting for Interest Cost Incurred before the End of a Construction Period." This statement will enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and will simplify accounting for interest cost incurred before the end of a construction period. The requirements of this statement are effective for reporting periods beginning after December 15, 2019 (fiscal year 2021). The City and the Fund are evaluating the impact, if any, upon its financial position, results of operations or cash flows upon adoption.

In August 2018, the GASB issued Statement No. 90, "Majority Equity Interests." This statement will improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and improve the relevance of financial statement information for certain component units. The requirements of this statement are effective for reporting periods beginning after December 15, 2018 (fiscal year 2020). The City is evaluating the impact, if any, upon its financial position, results of operations or cash flows upon adoption.

In May 2019, the GASB issued Statement No. 91, "Conduit Debt Obligations." This statement is to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with 1) commitments extended by issuers, 2) arrangements associated with conduit debt obligations, and 3) related note disclosures. The requirements of this statement are effective for reporting periods beginning after December 15, 2020 (fiscal year 2022). The City and the Fund are evaluating the impact, if any, upon its financial position, results of operations or cash flows upon adoption.

**Inventories of Material and Supplies**

Inventories of material and supplies are valued at average cost and charged to expense as used. Fuel is carried at market/replacement cost.

**Capital Assets**

The Fund defines capital assets as assets with an initial cost of more than \$5,000. Acquired or constructed property is recorded at historical cost or estimated historical cost. Donated property is recorded at the acquisition value on the date received. Construction costs (excluding land and equipment) are added to construction work-in-progress until the assets are placed in service and are depreciated following completion. Depreciation on equipment begins in the year it is placed in service. Interest costs on funds borrowed to finance the construction of capital assets are capitalized based on the weighted average interest rate of the outstanding debt applied to the average on-going construction in progress during the fiscal year. In the year ended June 30, 2019, \$6.8 million in interest costs was capitalized. In the year ended June 30, 2018, \$8.8 million in interest costs was capitalized.

Depreciation on Airport System buildings and improvements is computed using the straight-line method on the component asset base over the estimated useful life, ranging from fifteen (15) to fifty (50) years. Depreciation on equipment is computed using the straight-line method over the estimated useful life, ranging from three (3) to fifteen (15) years. Depreciation on depreciable intangibles is computed using the straight line method over a useful life that is dependent on the nature of the individual asset.

**Passenger Facility Charges**

The Federal Aviation Administration (FAA) approved a \$3.00 passenger facility charge (PFC) per enplaned passenger to be used for the construction of FAA approved airport capital assets at George Bush Intercontinental (IAH) effective December 1, 2008 and at William P. Hobby Airport (HOU) effective November 1, 2006. On January 20, 2015, the FAA approved an amendment to the existing PFC at both IAH and HOU increasing the rate from \$3.00 to \$4.50 per enplaned passenger effective March 1, 2015. On April 20, 2016, a second PFC application was approved at HOU with an earliest collection date of August 1, 2017. The current collection expiration dates are January 1, 2028 for IAH and July 1, 2038 for HOU. The airlines collect and remit this revenue, and the Fund records it as non-operating revenue. See Compliance Section for further information.

## NOTES TO THE FINANCIAL STATEMENTS

1. **Summary of Significant Accounting Policies, continued:****Compensated Absences**

Full-time civilian employees of the City are eligible for 10 days of vacation leave per year. After four years, employees receive 15 days. The amount of vacation time gradually increases after that, reaching a maximum of 25 days per year after 18 years of service. Employees may accumulate up to 105 days of vacation leave (60 days for employees hired after December 31, 1999). However, upon termination or retirement, full-time employees are paid a maximum of 90 days of unused vacation leave (45 days for employees with a computation date after December 31, 1999) which is based on the average rate of pay during the employee's highest paid 60 days of employment. Part-time and temporary employees (those working less than 30 hours per week) are not eligible for vacation or sick leave benefits.

Most full-time civilian employees are covered under the compensatory sick leave plan and receive a leave time allowance of 2.5 hours per payroll period (bi-weekly) up to a maximum of 65 hours per year. Employees who use fewer than 65 hours during the benefit year will receive a match of additional hours equal to the number of hours accrued minus the number of hours used. Once an employee's balance has reached 1,040 hours, no additional match for unused hours is given. Upon termination, all unused sick leave time allowances in excess of 1,040 hours are payable to the employee at the employee's rate of pay at the time of termination. An employee who uses less than 16 hours of sick leave in any benefit year receives up to three days of personal leave in the next year. Personal leave may be used in place of vacation leave, but will not accumulate and will not be paid out at termination. The other remaining full time civilian employees are covered by a sick plan that was closed to employees in 1985. That plan accumulates a cash value for every sick day not used, which is payable upon resignation or retirement.

The City also has adopted policies of compensatory time to comply with the Fair Labor Standards Act. These policies provide limits to the accumulation of compensatory time and also provide that time not used will be paid in cash. Only classified employees and civilian employees in certain pay grades routinely earn compensatory time.

Vacation and other compensatory time benefits are accrued as liabilities as the benefits are earned, to the extent that the City's obligation is attributable to employees' services already rendered, and it is probable that the City will compensate the employees for the benefits through paid time off or some other means, such as cash payments.

**Bond Premiums, Discounts and Issuance Costs**

Bond premiums and discounts and prepaid bond insurance in the Airport Fund are amortized over the term of the bonds using the effective interest method for fixed rate bonds and the straight-line method for variable rate bonds. Gains or losses on bond refunding are reported as net inflows or outflows and amortized over the term of the new bonds or the refunded bonds, whichever is lesser, using the same respective methods. Debt issuance costs are recognized as expense when incurred.

**Statement of Net Position and Cash Flow – Cash and Cash Equivalents and Investments**

All highly liquid securities with a maturity date of three months or less are considered to be cash equivalents. Investments are carried at fair value based on quoted market prices.

**Statements of Net Position and Cash Flow - Restricted Cash and Accounts Receivable**

The Fund reports assets as "restricted" when they are held by trustees according to trust indentures supporting various debt issues, principally the Special Facility Revenue Bonds (Consolidated Rental Car Facility) and Commercial Paper Notes. See Note 2 for restricted deposit details.

**Statement of Net Position – Contracts and Retainages Payable**

The portion of the contracts and retainages payable which is attributable to the acquisition, construction, or improvement of capital assets is allocated and applied to net investment in capital assets.

**Statement of Net Position – Net Position Classification**

Net position is displayed in three separate categories: net investment in capital assets; restricted net position; and unrestricted net position, based on the accessibility of the underlying assets. Net investment in capital assets includes all capital assets, however acquired, including accumulated depreciation, and the outstanding debt and deferred inflows of resources used to finance the construction, acquisition, or improvement of capital assets.

## NOTES TO THE FINANCIAL STATEMENTS

**1. Summary of Significant Accounting Policies, continued:**

Restricted net position includes assets, net of related liabilities, which are limited as to the manner in or purpose for which they may be used. Restrictions reported by the Fund are imposed either by other governments, as in grants or passenger facility charges, or through legally enforceable City ordinances, passed by City Council, which prioritize the use of Fund revenue as a protection to Airport System bondholders.

**Restricted net position – Restricted for debt service**

This category includes net position in the interest and sinking funds, debt service funds, and debt reserve funds that pay principal and interest for the Revenue Bonds, the Commercial Paper Notes, the Inferior Lien Contract, and the Special Facility Revenue Bonds (Consolidated Rental Car Facility Project). Unexpended Passenger Facility Charges are also included in this category, as they are primarily held, through agreements with the Federal Aviation Administration (FAA), for the repayment of capital financing. A debt service fund restricted for the payment of Pension Obligation Bonds, Series 2017 was also included from December 22, 2017 to March 1, 2019.

**Restricted net position – Restricted for maintenance and operations**

This category primarily consists of a reserve fund dedicated to operating and maintenance expense, mandated by the various City ordinances which authorized the issuance of revenue and revenue refunding bonds. At fiscal year end, the reserve fund is required to hold a balance representing at least 60 days of operating expenses, based on the annual operating budget authorized by City Council for the next fiscal year. At June 30, 2019, the net position restricted for maintenance and operations also included \$4.7 million restricted for past and future Disaster Recovery operating expenses.

**Restricted net position – Restricted for special facility**

This category holds Customer Facility Charges dedicated to administrative costs and facility improvements for the Consolidated Rental Car Facility (CRCF). These funds are held by The Bank of New York Mellon Trust Company, under a trust indenture authorized by City Council in conjunction with the issuance of the Special Facility Revenue Bonds and Revenue Refunding Bonds (CRCF Project).

**Restricted net position – Restricted for renewal and replacement**

The Renewal and Replacement (R&R) Fund was created by the various City ordinances which authorized the issuance of airport revenue and revenue refunding bonds. The R&R Fund is intended to replace depreciable assets, and to make major repairs and renovations. Airport revenue is transferred to this fund if it is not needed for maintenance and operations, for the debt service and reserve funds, or for the operating and maintenance reserve. The R&R fund can also be used for operations or debt service, if other funds are exhausted. If the R&R fund does not have a net position of at least \$10 million at the end of a fiscal year, then additional revenue must be transferred in the next fiscal year. If the R&R fund has a net position that is greater than \$10 million, then the excess is restricted for capital improvements.

**Restricted net position – Restricted for capital improvements**

This category consists primarily of the Airport Improvement Fund (AIF), created by the various City ordinances which authorized the issuance of revenue bonds. After maintenance and operating expenses are paid, and after all other transfers mandated by City ordinances are made, any net revenue remaining is required to be transferred to the AIF. The AIF is intended for capital expenditures, but it can also be used to cure deficiencies in the R&R fund. If the unappropriated AIF balance is (1) sufficient to cover the capital improvement program for 24 months, or (2) \$50 million, whichever is greater, then the AIF may be used by the City for any lawful purpose not inconsistent with the terms of any Federal grants or aid or any contracts to which the City is a party. Net position restricted for capital improvements also includes grant or contract funds received from the FAA or Transportation Security Administration (TSA) for the construction or acquisition of capital assets. Unspent proceeds from debt issuance are included in this category, along with an allocated portion of the associated unpaid debt, if the debt was issued for capital construction, improvement, or acquisition.



## NOTES TO THE FINANCIAL STATEMENTS

1. **Summary of Significant Accounting Policies, continued:****Net position – Unrestricted (deficit)**

This category is defined as any portion of net position that is not classified as either net investment in capital assets or restricted net position. The Fund's Master Ordinance for the Issuance of Revenue Obligations requires that system revenue not used for specific defined purposes be restricted for capital improvement. Before the Fund's implementation of GASB No. 68, "Accounting and Financial Reporting for Pensions," the Fund defined compliance with the Ordinance as the annual restriction of net revenue so that unrestricted net position would always be reported as zero. The unrestricted deficit in net position on June 30, 2017 was the amount of the Fund's net pension liability that was not covered by Fund assets when the Fund implemented GASB No. 68 on July 1, 2014, subsequently improved by a change in the pension plan to (\$126.9 million). See Note 6 for further information.

In fiscal year 2018, the Fund implemented GASB No. 75, "Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions." See Note 7 for further information. The cumulative effect of the implementation added a deficit of (\$21.3 million) to the unrestricted net position. Beginning in fiscal year 2018, the Airport System will set its rates and charges to amortize the deficit in the unrestricted net position over thirty years. The deficit was reduced by \$4.9 million in fiscal year 2019 to (\$138.4 million).

2. **Deposits and Investments****Deposits**

The City's investment policy requires all deposits to be fully collateralized with depository insurance; obligations of the United States of America or its agencies and instrumentalities (excluding those mortgages backed securities prohibited by the Public Funds Investment Act); or in any other manner and amount provided by law for the deposits of the City. At all times, such securities should have a fair value of not less than 102% of the amount of the deposits collateralized thereby, adjusted by the amount of applicable depository insurance. There were no deposits with custodial risk at year end.

**Cash and Cash Equivalents and Investments**

The City maintains a cash and investment pool (the Pool) that is available for use by all funds. On the Statement of Net Position, "Cash and Cash Equivalents" includes each fund's portion of the Pool and each fund's non-pooled cash; "Investments" represents each fund's portion of the Pool and non-pooled investment. Participation in the Pool is limited to normal operating activities of the fund and other funds that are restricted because of statutory or contractual considerations, but does not include cash on hand (petty cash and change funds) which is included in non-pooled cash. Earnings from the Pool are allocated to the funds based upon each fund's average daily balance in the Pool. The Fund's balance in pooled and non-pooled accounts follows.

Fiscal Year	Pooled Cash and Cash Equivalents	Pooled Investments	Total Pooled Cash and Investment	Non-pooled cash	Non-pooled Investments	Total Cash and Investments
2019	\$144,070,828	\$1,261,979,730	\$1,406,050,558	\$5,450	\$50,623,023	\$1,456,679,031
2018	\$134,352,929	\$1,184,222,647	\$1,318,575,576	\$5,450	\$43,878,033	\$1,362,459,059

The Airport Fund had petty cash and change funds totaling \$5,450 included in the non-pooled cash at June 30, 2019 and June 30, 2018.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

2. **Deposits and Investments, continued:****Investments and Risk Disclosures**

The following describes the investment positions of the City's operating funds as of June 30, 2019 and June 30, 2018. On these dates, the City had \$4.5 billion and \$4.0 billion, respectively, in high grade, fixed income investments. All investments are governed by state law and the City's Investment Policy, which dictates the following objectives, in order of priority:

1. Safety
2. Liquidity
3. Return on Investment
4. Legal Requirements

These funds are managed internally by City personnel within a citywide investment pool. The investments listed below do not include the City's three pension funds, which are described separately in this report. This pool consists of all working capital, construction, and debt service funds which are not subject to yield restriction under IRS arbitrage regulations. The funds of the City's enterprise systems which include the Airport Fund, as well as the general fund, are commingled in this pool in order to gain operational efficiency. Approximately 98.6% and 98.5% of the City's total investable funds are contained in this portfolio on June 30, 2019 and June 30, 2018 respectively.

	(1)(2) FY2019 & FY2018 Credit Quality Ratings	June 30, 2019		June 30, 2018	
		Fair Value (\$ in millions)	WAM* (years)	Fair Value (\$ in millions)	WAM* (years)
City of Houston Investment					
U.S. Treasury Securities	AAA	\$ 2,577.16	1.343	\$ 2,705.11	1.509
Government Agency Securities (3)	AAA	1,058.60	1.651	681.34	1.544
Government Agency Securities (State of Israel Bond)	A+	-	-	5.01	0.173
Government Agency Securities (3) (4)	Not Rated	228.00	2.574	-	-
Government Mortgaged Backed Securities (3) (4)	Not Rated	5.91	1.427	9.57	1.894
MMF - TexSTAR Cash Reserves	AAA Short Term	191.56	0.041	262.35	0.060
Commercial Paper	A-1+/P-1 Short Term	248.79	0.215	139.59	0.136
Municipal Securities	AAA Long Term	86.93	1.120	80.41	1.329
Municipal Securities	AA Long Term	126.54	1.300	121.93	1.215
Municipal Securities	A Long Term	4.77	0.626	5.71	1.391
<b>Total Investments</b>		<b>\$ 4,528.26</b>	<b>1.353</b>	<b>\$ 4,011.02</b>	<b>1.358</b>

\* Weighted Average Maturity (WAM) is computed using average life of mortgage backed securities and effective maturity of callable securities.

(1) Fitch Ratings Inc. has assigned an AAA credit quality rating and S1 volatility rating to the City's General Investment Pool. The AAA signifies the highest level of credit protection, and the S1 rating signifies volatility consistent with a portfolio of government securities maturing from one to three years.

(2) All credit ratings shown are either actual Fitch ratings, or if a Fitch credit rating is not available, the equivalent Fitch credit rating is shown to represent the actual Moody's or Standard & Poor's credit rating.

(3) These are securities issued by government sponsored enterprises, including the Federal Home Loan Bank, Federal Home Loan Mortgage Corporation (Freddie Mac), Federal National Mortgage Corporation (Fannie Mae), and Federal Farm Credit Bank.

(4) These securities were issued by the Federal Home Loan Bank, Freddie Mac, Fannie Mae, and Farmer Mac. While these individual issues were not rated, senior lien debt of these entities is rated AAA.

## NOTES TO THE FINANCIAL STATEMENTS

2. **Deposits and Investments, continued:****Risk Disclosures:**

*Interest Rate Risk.* In order to ensure the ability of the City to meet obligations and to minimize potential fair value losses arising from rising interest rate environments, the City's investment policy limits this investment portfolio's dollar-weighted average maturity to 2.5 years maximum. As of June 30, 2019, this investment portfolio's dollar-weighted average maturity was 1.35 years. Modified duration was 1.32 years. Modified duration can be used as a multiplier to determine the percent change in price of a bond portfolio for every 100 basis point (1%) change in yield. For example, a portfolio with a modified duration of 1.32 years would experience approximately a 1.32% change in market price for every 100 basis point change in yield.

*Credit Risk – Investments.* The U.S. Treasury Securities and Housing and Urban Development Securities are direct obligations of the United States government. Government Agency Securities and Mortgage Backed Securities were issued by government sponsored enterprises but are not direct obligations of the U.S. Government. The Money Market Mutual Funds were rated AAA. Municipal Securities were rated at least A. The City's investment policy limits investments in the General Investment Pool to high quality securities with maximum maturity of five years for all U.S. Treasuries, Government Agency, and Municipal Securities with the exception of Government Mortgaged Backed Securities which can have maximum maturity of 15 years. Certificates of Deposit maximum maturity is two years, and Commercial Paper maximum maturity is 270 days. The General Investment Pool maximum sector exposure are as follow: U.S. Treasuries up to 100%; Government Agency Securities up to 85% with maximum exposure to any one Agency issuer is 35%; Mortgage Backed Securities up to 20%; Municipal Securities up to 20% with a rating not less than A by a nationally recognized rating agency; Money Market Mutual Funds up to 25%; Certificates of Deposit up to 15%; and Commercial Paper up to 15%.

*Credit Risk – Securities Lending.* Under its securities lending program, the City receives 102% of fair value for its U.S. Treasury securities at the time the repurchase agreements are signed, and agreements are limited to 90 days by policy and have been less than 35 days by practice. At June 30, 2019 there were no securities lending agreements outstanding.

*Custodial Credit Risk.* The custodial credit risk for investments is the risk that in the event of failure of a counterparty, the City will not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are not registered in the name of the City, and are held by either the counterparty or the counterparty's trust department or agent but not in the City's name. As of June 30, 2019, none of the City's investments in the General Investment Pool 9900 were subject to custodial credit risk.

*Foreign Currency Risk.* Foreign currency risk is the risk that investments will change value due to changes in exchange rates between time of purchase and reporting or sale. The City's general pool investments are limited by policy to US dollar denominated investments and not subject to this risk.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

2. Deposits and Investments, continued:

A summary of the Pool's investment under the requirements of the fair value hierarchy follows:

Fair Value Measurements Using (\$ in millions)								
Investments by fair value level	Total June 30, 2019	Quoted prices (Level 1)	Other significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total June 30, 2018	Quoted prices (Level 1)	Other significant observable inputs (Level 2)	Significant unobservable inputs (Level 3)
U.S. Treasury Securities	\$ 2,577.16	\$ 2,577.16	\$ -	\$ -	\$ 2,705.11	\$ 2,705.11	\$ -	\$ -
Government Agency Securities	1,286.60	-	1,286.60	-	681.34	-	681.34	-
Government Agency Securities (State of Israel Bd)	-	-	-	-	5.01	-	-	5.01
Government Mortgaged Backed Securities	5.91	-	5.91	-	9.57	-	9.57	-
Municipal Securities	218.24	-	218.24	-	208.05	-	208.05	-
Commercial Paper	248.79	-	248.79	-	139.59	-	139.59	-
<b>Total Investments by Fair Value Level</b>	<b>\$ 4,336.70</b>	<b>\$ 2,577.16</b>	<b>\$ 1,759.54</b>	<b>\$ -</b>	<b>\$ 3,748.67</b>	<b>\$ 2,705.11</b>	<b>\$ 1,038.55</b>	<b>\$ 5.01</b>
<b>Investments measured at the net asset value (NAV)</b>								
MMF - TexSTAR Cash Reserves	\$ 191.56	\$ -	\$ 191.56	\$ -	\$ 262.35	\$ -	\$ 262.35	\$ -
<b>Total investments measured at the net asset value (NAV)</b>	<b>\$ 191.56</b>	<b>\$ -</b>	<b>\$ 191.56</b>	<b>\$ -</b>	<b>\$ 262.35</b>	<b>\$ -</b>	<b>\$ 262.35</b>	<b>\$ -</b>
<b>Total investments measured at fair value and NAV</b>	<b>\$ 4,528.26</b>	<b>\$ 2,577.16</b>	<b>\$ 1,951.10</b>	<b>\$ -</b>	<b>\$ 4,011.02</b>	<b>\$ 2,705.11</b>	<b>\$ 1,300.90</b>	<b>\$ 5.01</b>

**Security Valuation Disclosure:**

Debt securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 & 3 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Pricing Sources: IDC for municipal securities and Reuters for all else.

TexSTAR uses the fair value method to report its investments. Under the fair value method, fixed income securities are valued each day by independent or affiliated commercial pricing services or third party broker-dealers. In instances where sufficient market activity exists, the pricing services or broker-dealers may utilize a market-based approach through which quotes from market makers are used to determine fair value. In instances where sufficient market activity may not exist or is limited, the broker-dealers or pricing services also utilize proprietary valuation models which may consider market transactions in comparable securities and the various relationships between securities in determining value and/or market characteristics such as benchmark yield curves, option adjusted spreads, credit spreads, estimated default rates, coupon-rates, anticipated timing of principal repayments, underlying collateral, and other unique security features in order to estimate the relevant cash flows, which are then discounted to calculate the fair values.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

2. **Deposits and Investments, continued:****Restricted Cash and Cash Equivalents - Miscellaneous Money Market Accounts**

In addition to its investment pools, the City maintains several money market accounts for various purposes. These accounts are considered cash and cash equivalents on the Statements of Cash Flows because they maintain a weighted average maturity of less than three months. The Fund's portion of these is as follows:

	FY2019 Credit Quality Ratings	Fair Value June 30, 2019 (\$ in millions)	FY2018 Credit Quality Ratings	Fair Value June 30, 2018 (\$ in millions)	FY2019 & FY2018 Weighted Average Maturity
Blackrock Federal Institutional Fund: Balances held for Consolidated Rental Car Facility operations, improvements, debt service	AAA	\$ 50.616	AAA	\$ 43.218	< 60 days
JP Morgan US Treasury Securities Money Market Fund: Balances held for auction bonds debt service	AAA	-	AAA	0.653	< 60 days
First American US Treasury Money Market Fund: Balance held for commercial paper debt service	AAA	0.007	AAA	0.007	< 60 days
Total Fair Value - Money Market Accounts		<u>\$ 50.623</u>		<u>\$ 43.878</u>	

**Risk Disclosures:**

*Interest Rate Risk.* These money market funds maintain an average maturity of less than 60 days and seek to maintain a stable net asset value of \$1.00. These funds are redeemable on a same day notice.

*Credit Risk.* These funds hold only US dollar denominated securities that present minimal credit risk. They have the highest credit ratings.

*Custodial Credit Risk.* As of June 30, 2019, none of the City's investments in this pool were subject to custodial credit risk.

*Foreign Currency Risk.* The City's investments in these accounts are all US dollar denominated and not subject to foreign currency risk.

A summary of investments under the requirements of the fair value hierarchy follows:

	Fair Value Measurements Using (\$ in millions)					
	Total June 30, 2019	Quoted prices (Level 1)	Other significant observable inputs (Level 2)	Total June 30, 2018	Quoted prices (Level 1)	Other significant observable inputs (Level 2)
<b>Investments measured at the net asset value (NAV)</b>						
BlackRock FedFund-Institutional	50.616	-	50.616	43.218	-	43.218
JP Morgan US Treasury Securities MMF	-	-	-	0.653	-	0.653
First American US Treasury MMF	0.007	-	0.007	0.007	-	0.007
Total investments measured at the net asset value (NAV)	<u>\$ 50.623</u>	<u>\$ -</u>	<u>\$ 50.623</u>	<u>\$ 43.878</u>	<u>\$ -</u>	<u>\$ 43.878</u>

**Security Valuation Disclosure:**

Security fair value levels are established on a security by security basis. Matrix pricing, market corroborated pricing inputs such as yield curve and indices; often includes fixed income bonds, over the counter swaps, and other derivatives. These can also include securities priced using quoted prices for similar assets or liabilities in active markets and quoted prices for similar assets or liabilities in markets that are not active

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

3. Capital Assets

Summaries of changes in fixed assets for the years ended June 30, 2019 and June 30, 2018 follow (in thousands):

	Balance June 30, 2018	Additions	Retirements	Transfers	Balance June 30, 2019
Capital assets not being depreciated :					
Land	\$ 216,107	\$ -	\$ (7)	\$ -	\$ 216,100
Rights & Intangibles - Non-Amortizable	12,679	-	-	95	12,774
Construction work in progress	182,844	119,871	-	(96,028)	206,687
Total capital assets not being depreciated	411,630	119,871	(7)	(95,933)	435,561
Other capital assets:					
Buildings and building improvements	2,985,527	23	(536)	81,199	3,066,213
Improvements other than buildings	2,181,883	45	-	10,302	2,192,230
Equipment	268,259	3,846	(2,234)	4,432	274,303
Rights & Intangibles - Amortizable	4,697	-	-	-	4,697
Total other capital asset	5,440,366	3,914	(2,770)	95,933	5,537,443
Less accumulated depreciation for:					
Buildings and building improvements	(1,425,400)	(98,497)	296	-	(1,523,601)
Improvements other than buildings	(1,391,939)	(60,526)	-	-	(1,452,465)
Equipment	(214,844)	(14,468)	2,226	-	(227,086)
Rights & Intangibles	(3,769)	(775)	-	-	(4,544)
Total accumulated depreciation	(3,035,952)	(174,266)	2,522	-	(3,207,696)
Other capital assets, net	2,404,414	(170,352)	(248)	95,933	2,329,747
Total Capital assets, net	\$ 2,816,044	\$ (50,481)	\$ (255)	\$ -	\$ 2,765,308
	Balance June 30, 2017	Additions	Retirements	Transfers	Balance June 30, 2018
Capital assets not being depreciated :					
Land	\$ 216,079	\$ -	\$ -	\$ 28	\$ 216,107
Rights & Intangibles - Non-Amortizable	9,569	-	-	3,110	12,679
Construction work in progress	135,233	107,032	-	(59,421)	182,844
Total capital assets not being depreciated	360,881	107,032	-	(56,283)	411,630
Other capital assets:					
Buildings and building improvements	2,970,950	-	(228)	14,805	2,985,527
Improvements other than buildings	2,145,180	-	-	36,703	2,181,883
Equipment	261,485	2,176	(177)	4,775	268,259
Rights & Intangibles - Amortizable	5,035	(338)	-	-	4,697
Total other capital asset	5,382,650	1,838	(405)	56,283	5,440,366
Less accumulated depreciation for:					
Buildings and building improvements	(1,328,714)	(96,707)	23	-	(1,425,400)
Improvements other than buildings	(1,327,987)	(63,952)	-	-	(1,391,939)
Equipment	(200,320)	(14,701)	177	-	(214,844)
Rights & Intangibles	(3,076)	(693)	-	-	(3,769)
Total accumulated depreciation	(2,860,099)	(176,053)	200	-	(3,035,952)
Other capital assets, net	2,522,551	(174,215)	(205)	56,283	2,404,414
Total Capital assets, net	\$ 2,883,432	\$ (67,183)	\$ (205)	\$ -	\$ 2,816,044

Interest Cost: (in thousands)	2019	2018	Percentage Change
Total Interest Cost	\$ 88,386	\$ 98,777	-10.5%
Capitalized Interest	(6,811)	(8,833)	-22.9%
Interest Expense	\$ 81,575	\$ 89,944	-9.3%

In fiscal year 2019 the Construction Work in Progress ending balance is 7% higher than in fiscal year 2018. This increase is due to additional projects undertaken such as Reconstruction of Taxiway WA at IAH, Non-Standard FAA Taxiway at HOU, Parking Office at New South Parking, Enabling Utilities at Landside, and the Demo Air Traffic Control Tower at IAH.

There is also an increase in completed projects transferred out of Work in Progress. This increase includes ITRP Project Management Office, Air Traffic Control Tower at EFD, MOA New C North Ramp, Public Address System, and Explosive Detective System Upgrades at Terminal C/E at IAH.

In fiscal year 2019 HAS retired and sold 1.830 acres of wetlands located at Lake Houston Forested Wetland Mitigation Area for about \$7,298.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

4. **Leases**

## A. The Fund as Lessee

The Airport System has obtained equipment through long-term operating leases. The total cost for such leases was \$310,845 for the year ended June 30, 2019.

## B. The Fund as Lessor

The Airport System is the lessor of approximately ten percent of its land and substantially all of its buildings and improvements. These lease agreements are non-cancelable operating leases with fixed minimum rentals and non-cancelable operating use and lease agreements with annually adjusted rates. Rental income is earned from leasing various parcels of land with asset costs of \$21,609,968 to airlines, fixed base operators and various corporations for hangars, aircraft maintenance facilities, flight kitchens and cargo buildings; to auto rental companies for their service facilities and storage lots; and to a variety of other entities for buildings and other permanent improvements. Airlines and airport concessionaires lease various sections of City owned airport buildings and improvements for ticket counters, passenger hold rooms, baggage carousels, restaurants, retail stores and other facilities. Leased buildings, improvements and equipment have asset costs of \$5,532,746,287 and carrying costs of \$2,325,049,950. Accumulated depreciation on all these assets is \$3,207,696,337.

Minimum guaranteed income on such non-cancelable operating leases is as follows (in thousands):

Year Ending June 30	Minimum Rental Income
2020	\$ 73,243
2021	61,777
2022	58,208
2023	57,646
2024	55,178
2025-2029	156,777
2030-2034	60,953
2035-2039	54,188
2040-2044	51,088
2045-2049	43,577
2050-2054	36,467
2055-2058	2,236
Total	\$ 711,338

Contingent income associated with the Airport System non-cancelable operating leases was approximately \$12,308,101 and \$13,083,404 for the years ended June 30, 2019 and 2018, respectively. Contingent income is earned when a concessionaire's payment, based on a percentage of sales, is higher than the minimum amount guaranteed to the Airport System under the terms of the lease. In addition, income is earned from certain non-cancelable operating use and lease agreements for landing fees and terminal building rentals. Such income is adjusted annually based on a compensatory formula to recover certain operating and capital costs of the related facilities. Compensatory income for the years ended June 30, 2019 and 2018 is as follows (in thousands):

	Compensatory Income	
	2019	2018
Landing Fees	\$ 84,357	\$ 92,585
Terminal Space – Airline	186,006	194,511
	\$ 270,363	\$ 287,096

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

## 5. Long-Term Liabilities

Changes in long-term liabilities for the years ended June 30, 2019 and 2018 are summarized as follows (in thousands):

	Balance June 30, 2018	Additions	Retirements/ Transfers	Balance June 30, 2019	Due within One Year
Revenue bonds payable	\$ 2,086,995	\$ 569,110	\$ (720,655)	\$ 1,935,450	\$ 80,110
Plus unamortized premium	112,362	86,243	(18,678)	179,927	-
Less unamortized discount	(2,422)		1,747	(675)	-
Revenue bonds payable, net	<u>2,196,935</u>	<u>655,353</u>	<u>(737,586)</u>	<u>2,114,702</u>	<u>80,110</u>
Special facility bonds payable	86,100		(5,715)	80,385	5,960
Commercial paper payable	21,473	27,000		48,473	-
Pension obligation bonds	29,616		(27,610)	2,006	-
Claims for workers compensation	2,276	434	(904)	1,806	904
Compensated absences	13,059	9,539	(9,989)	12,609	6,120
Net pension liability payable	230,999	1,058	(2,300)	229,757	-
Other post employment benefits	89,450		(16,164)	73,286	-
Other post employment benefits - LTD	457	129		586	-
Total long-term liabilities	<u>\$ 2,670,365</u>	<u>\$ 693,513</u>	<u>\$ (800,268)</u>	<u>\$ 2,563,610</u>	<u>\$ 93,094</u>

	Balance June 30, 2017	Additions	Retirements/ Transfers	Balance June 30, 2018	Due within One Year
Revenue bonds payable	\$ 2,010,410	\$ 415,770	\$ (339,185)	\$ 2,086,995	\$ 78,520
Plus unamortized premium	61,302	62,819	(11,759)	112,362	-
Less unamortized discount	(2,717)	-	295	(2,422)	-
Revenue bonds payable, net	<u>2,068,995</u>	<u>478,589</u>	<u>(350,649)</u>	<u>2,196,935</u>	<u>78,520</u>
Special facility bonds payable	91,590	-	(5,490)	86,100	5,715
Inferior lien contract	6,240	-	(6,240)	-	-
Commercial paper payable	87,000	18,000	(83,527)	21,473	-
Pension obligation bonds	2,006	27,610	-	29,616	27,610
Note payable	115,421	1,939	(117,360)	-	-
Claims for workers compensation	1,419	1,739	(882)	2,276	881
Compensated absences	12,621	10,061	(9,623)	13,059	6,127
Net pension liability payable	254,420	-	(23,421)	230,999	-
Other post employment benefits	74,657	20,842	(6,049)	89,450	-
Other post employment benefits - LTD	-	459	(2)	457	-
Total long-term liabilities	<u>\$ 2,714,369</u>	<u>\$ 559,239</u>	<u>\$ (603,243)</u>	<u>\$ 2,670,365</u>	<u>\$ 118,853</u>

## Purpose of Debt

The Fund issues revenue bonds and commercial paper for the purpose of enlarging, maintaining and improving the Houston Airport System. The Fund has issued refunding bonds from time to time when there have been opportunities for economic gain. These refundings have been structured as legal defeasances of the old debt as ruled by the Texas Attorney General, and such debt has been removed from the Fund's books.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

5. **Long-Term Liabilities, continued:****Debt Service Requirements to Maturity**

Aggregate future Airport system debt service payments to maturity as of June 30, 2019 were as follows (in thousands):

Year Ending June 30	Airport System Total Future Requirements		
	Principal	Interest	Total
2020	\$ 86,070	\$ 99,169	\$ 185,239
2021	95,330	94,780	190,110
2022	150,063	89,215	239,278
2023	104,540	83,242	187,782
2024	109,600	77,717	187,317
2025-2029	632,778	296,174	928,952
2030-2034	637,949	130,573	768,522
2035-2039	166,449	42,472	208,921
2040-2044	66,980	8,533	75,513
2045-2049	16,555	2,149	18,704
Total	\$ 2,066,314	\$ 924,024	\$ 2,990,338

Year Ending June 30	Airport System Subordinate Lien Revenue Bonds	
	Principal	Interest
2020	\$ 80,110	\$ 92,557
2021	89,090	88,330
2022	94,085	83,743
2023	96,375	78,961
2024	100,730	73,997
2025-2029	588,840	287,834
2030-2034	636,615	130,291
2035-2039	166,070	42,452
2040-2044	66,980	8,533
2045-2049	16,555	2,149
Total	\$ 1,935,450	\$ 888,847

Year Ending June 30	Airport System Commercial Paper	
	Principal	Interest
2020	\$ -	\$ 1,467
2021	-	1,466
2022	48,473	675
2023	-	-
2024	-	-
2025-2029	-	-
2030-2034	-	-
2035-2039	-	-
2040-2044	-	-
2045-2049	-	-
Total	\$ 48,473	\$ 3,608

Year Ending June 30	Airport System Special Facility Bonds - Rental Car Facility	
	Principal	Interest
2020	\$ 5,960	\$ 5,038
2021	6,240	4,877
2022	7,505	4,691
2023	8,165	4,175
2024	8,870	3,613
2025-2029	43,645	7,808
2030-2034	-	-
2035-2039	-	-
2040-2044	-	-
2045-2049	-	-
Total	\$ 80,385	\$ 30,202

Year Ending June 30	Airport System Pension Obligations	
	Principal	Interest
2020	\$ -	\$ 107
2021	-	107
2022	-	106
2023	-	106
2024	-	107
2025-2029	293	532
2030-2034	1,334	282
2035-2039	379	20
2040-2044	-	-
2045-2049	-	-
Total	\$ 2,006	\$ 1,367

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

5. Long-Term Liabilities, continued:

	Maturity Year	Original Interest Rate Range	Face Value Outstanding June 30, 2019	Face Value Outstanding June 30, 2018
<b>Airport System Subordinate Lien Revenue Bonds:</b>				
Series 2000B, \$269,240,000 original principal	2030	5.45%-5.7%	\$ 44,515	\$ 44,515
Series 2002A, \$200,050,000 original principal	2032	5%-5.625%	20,005	20,005
Series 2002B, \$274,455,000 original principal	2032	5%-5.5%	27,450	27,450
<b>Periodic Auction Reset Securities</b>				
Series 2000P-1, \$50,000,000 original principal	2030	N/A	-	32,275
Series 2000P-2, \$50,000,000 original principal	2030	N/A	-	32,050
<b>Auction Rate Securities</b>				
Series 2002C, \$100,000,000 original principal	2032	N/A	-	71,175
Series 2002D-1, \$75,000,000 original principal	2032	N/A	-	55,800
Series 2002D-2, \$75,000,000 original principal	2032	N/A	-	50,975
<b>Airport System Subordinate Lien Revenue Refunding Bonds:</b>				
Series 2007B, \$298,670,000 original principal	2032	4%-5%	-	8,715
Series 2011A, \$449,975,000 original principal	2026	3%-5%	209,370	245,200
Series 2011B, \$116,930,000 original principal	2026	3%-5%	64,475	72,650
Series 2012A, \$286,585,000 original principal	2032	5%	275,315	280,355
Series 2012B, \$217,135,000 original principal	2032	5%	217,135	217,135
Series 2018A, \$130,550,000 original principal	2041	5%	130,550	130,550
Series 2018B, \$285,220,000 original principal	2048	5%	285,220	285,220
Series 2018C, \$212,820,000 original principal	2032	5%	212,820	-
Series 2018D, \$356,290,000 original principal	2039	5%	356,290	-
<b>Variable Rate Debt Obligations</b>				
Series 2010, \$93,730,000 original principal	2030	N/A	92,305	92,505
<b>Airport System Senior Lien Revenue and Refunding Bonds:</b>				
Series 2009A, \$449,660,000 original principal	2039	5%-5.5%	-	420,420
<b>Total principal</b>			<b>\$ 1,935,450</b>	<b>\$ 2,086,995</b>
<b>Less: Total current maturities</b>			<b>(80,110)</b>	<b>(78,520)</b>
<b>Unamortized discount</b>			<b>(675)</b>	<b>(2,422)</b>
<b>Unamortized premium</b>			<b>179,927</b>	<b>112,362</b>
<b>Total revenue bonds payable - long term</b>			<b>\$ 2,034,592</b>	<b>\$ 2,118,415</b>

## NOTES TO THE FINANCIAL STATEMENTS

5. **Long-Term Liabilities, continued:****New Bonds**

The Airport System Subordinate Lien Revenue Refunding Bonds, Series 2018C (AMT) and the Airport System Subordinate Lien Revenue Refunding Bonds, Series 2018D (Non-AMT) were priced on July 17, 2018 and delivered on August 2, 2018, with a combined par amount of \$569,110,000. The bonds have a coupon rate of 5.0%, a true interest cost of 3.34%, and an arbitrage yield of 2.86%. They mature in varying amounts from 2019 to 2039.

Series 2018C was issued with a par amount of \$212,820,000 to current refund the following auction rate bonds: Airport System Subordinate Lien Revenue Bonds, Series 2000P-1 (AMT) \$32,275,000; Airport System Subordinate Lien Revenue Bonds, Series 2000P-2 (AMT) \$32,050,000; Airport System Subordinate Lien Revenue Bonds, Series 2002C (AMT) \$71,175,000; Airport System Subordinate Lien Revenue Bonds, Series 2002D-1 (AMT) \$55,800,000; and Airport System Subordinate Lien Revenue Bonds, Series 2002D-2 (AMT) \$50,975,000, and to pay for costs of issuance. Net present value savings on the refunding were \$12.9 million or 5.3%, with total debt service reduced by \$15.6 million. Series 2018C will reach final maturity on July 1, 2032.

Series 2018D was issued with a par amount of \$356,290,000 to current refund \$409,685,000 in outstanding Airport System Senior Lien Revenue and Refunding Bonds Series 2009A (Non-AMT) and to pay costs of issuance. Series 2018D will reach final maturity on July 1, 2039. Net present value savings on the refunding were \$77.4 million or 18.9% of the refunded bonds. Total debt service was reduced by \$107.0 million. For information on events that occurred after June 30, 2019, see Note 12.

**Security for Airport Debt**

To the extent it legally may do so, the Fund covenants in its bond ordinances to charge rates for use of the Airport System in order that in each fiscal year the net revenues will be not less than 125% of the debt service requirements for Senior Lien Bonds for such fiscal year and 110% of the debt service requirements for Subordinate Lien Bonds for such fiscal year. Generally, the bonds may be redeemed prior to their maturities in accordance with the bond ordinances and at prices which include premiums ranging downward from 1%.

The Fund presently has three outstanding Senior Lien Debt Service Reserve Fund Surety Policies issued by Financial Guaranty Insurance Corporation (FGIC) and reinsured by National Public Finance Guarantee Corporation for any outstanding Senior Lien Notes. These policies have an aggregate maximum amount of \$12,374,996 and terminate on October 25, 2023 and July 1, 2030.

The Fund has purchased Subordinate Lien Debt Service Reserve Fund Surety Policies that unconditionally guarantee the payment of the current principal and interest on all outstanding Airport System subordinate lien issues. The surety policies have termination dates ranging from July 1, 2022 to July 1, 2032. Each of the draws made against the surety policies shall bear interest at the prime rate plus two percent, not to exceed a maximum interest rate of 12%. The repayment provisions require one-twelfth of the policy costs for each draw to be repaid monthly, beginning the first month following the date of each draw. The policies were issued by (1) FGIC in the aggregate maximum amount of \$102,949,865, reinsured by National Public Finance Guarantee Corporation; and (2) Assured Guarantee Municipal Corporation in the aggregate maximum amount of \$31,921,384. The Airport System Fund also has a cash reserve of \$68,960,003 in the Subordinate Lien Bond Reserve Fund.

**Airport System Inferior Lien Contract**

On July 1, 2004 the City and United Airlines, formerly Continental Airlines, Inc., entered into a Sublease Agreement associated with the Special Facilities Lease for the Automated People Mover System and the City's Airport System Special Facilities Revenue Bonds (Automated People Mover Project) Series 1997A (1997A Special Facilities Bonds). The City assumed United Airlines' interest in the project upon completion of the expansion of the Automated People Mover System on January 25, 2005. As part of the Sublease, the City agreed to make sublease payments that include amounts equal to the debt service on the 1997A Special Facilities Bonds. The payments are payable from Airport System net revenues on the same priority as inferior lien bonds. Accordingly, the principal amount remaining on the 1997A Special Facilities Bonds, totaling \$6,240,000 at June 30, 2017, was recorded as an Inferior Lien Contract. The 1997A Bonds reached final maturity on July 15, 2017.

## NOTES TO THE FINANCIAL STATEMENTS

5. **Long-Term Liabilities, continued:****Variable Rate Debt**

The Fund issued Airport System Subordinate Lien Revenue Bonds Series 2000P-1, Series 2000P-2, Series 2002C, Series 2002D-1, and Series 2002D-2 as auction rate, or auction reset, securities. The auctions initially took place in 7, 28, or 35 day periods, but in July and August, 2005, the auction periods for all five issues were set to 7 days. Starting in February 2008, various auction rate securities began to not be remarketed. Auction rate bonds that cannot be sold remain with the bondholder. However, if the auction is not successful, the rate is reset based on predetermined formulae which include the rating of the insurer, or the underlying rating of the Fund if it is higher than the insurer's rating. The formula for the Series 2000P-1 and Series 2000P-2 was 125% of the commercial paper rate until July 30, 2009, 150% until April 16, 2010 and 200% thereafter. The formula for the Series 2002C, Series 2002D-1, and Series 2002D-2 was 200% of LIBOR. Proceeds from Airport System Revenue Refunding Bonds, Series 2018C, delivered on August 2, 2018, refunded all outstanding balances for the auction rate securities. Final principal payments were made between September 4 and September 7, 2018.

Airport System Revenue Refunding Bonds, Series 2005A, were issued as variable rate demand obligations with a weekly reset. Series 2005A was refunded by Series 2010 on December 21, 2010. Series 2010 is also a variable rate demand obligations issue with a weekly reset. The rate in effect at June 30, 2019, including remarketing fees, is 1.85%. Should Series 2010 be tendered and not remarketed, principal and interest will be paid by a letter of credit issued by Barclay's Bank, PLC. The reimbursement agreement for the letter of credit was amended on December 6, 2017, to extend the termination date to December 22, 2020 unless further extended or terminated. The letter of credit covers the outstanding par value of the bonds plus 35 days accrued interest at a 12% annual rate. The facility fee rate for the letter of credit will be increased to .46% from .425% as of July 28, 2019. If the remarketing agent is unable to resell the Series 2010 bonds, then the letter of credit will pay the principal to the bondholders and the bonds will become bank bonds, subject to the greater of several options for interest rates. The maximum interest rate permitted under the ordinance is 10%. After 60 days, the bank bonds become a term loan, where the Airport System must pay six semi-annual principal payments over three years to retire the loan. The Fund has made no draws on the letter of credit through June 30, 2019. Because the Series 2010 Bonds were issued as multi-modal bonds, the Houston Airport System can elect to convert the Bonds into long-term fixed rate bonds that would not require a letter of credit.

**Arbitrage Rebate**

Arbitrage rebate rules, under Chapter 148 of the Federal Tax Code, require generally that a tax-exempt bond issuer pay to the federal government any profit made from investing bond proceeds at a yield above the bond yield, when investing in a taxable market. Payments based on cumulative profit earned by bonds are due, in general, every five years. During Fiscal Year 2017, the Airport Fund paid \$1,682 of arbitrage rebate on interest income earned by commercial paper notes. At June 30, 2019 and June 30, 2018, yield restriction and arbitrage rebate payable by the Airport Fund was \$0 and \$0, respectively.

**Commercial Paper**

Airport System Commercial Paper Notes (Notes) were originally authorized for \$150 million for Series A and B and \$150 million for Series C to establish, improve, enlarge, and extend the Houston Airport System, acquire land, and pay interest on the Notes. Between July 1, 2013 and December 20, 2013, Series A and B were collateralized by a direct pay letter of credit issued by Bank of America, N.A. On November 20, 2013, the City re-authorized and amended the Series A and B Notes. A new direct pay letter of credit was issued by the Royal Bank of Canada on December 18, 2013, covering \$150 million in face value plus \$11.1 million in respect of 270 days accrued interest computed at 10%. This letter of credit expired on December 16, 2016 and was replaced by a letter of credit for the same amount issued by Sumitomo Mitsui Banking Corporation, which will expire on December 15, 2021. Any advances made under the letter of credit and not repaid within 90 days will be converted to term loans payable in twenty quarterly installments, subject to the greater of several options for interest rates. The maximum interest rate permitted under the ordinance is 15%. On June 30, 2017 there were \$87.0 million in Series A and B Notes outstanding. Subordinate Lien Revenue and Refunding Bonds, Series 2018A and Series 2018B, together refunded \$83.5 million in Commercial Paper Notes, and additional draws for \$18 million brought the balance of Series A Notes outstanding at June 30, 2018 to \$21.5 million. During Fiscal Year 2019, the Airport System has drawn \$27 million, to bring the total outstanding Commercial Paper Series A Notes to \$48.5 million. Interest rates on the outstanding Notes range from 1.47% to 1.87%.

## NOTES TO THE FINANCIAL STATEMENTS

5. **Long-Term Liabilities, continued:****Forward Delivery Bond Purchase Agreement**

On October 21, 2015, the City terminated its authorization for the \$150 million Series C Commercial Paper Notes, and instead authorized the issuance of \$450 million in Airport System Inferior Lien Revenue Bonds, in one or more series. On November 5, 2015 the City authorized execution of a forward delivery purchase agreement with the Royal Bank of Canada, to expire on November 5, 2022, for the issuance of up to \$450 million in Inferior Lien Revenue Bonds. However, City Council must reauthorize this liquidity arrangement annually. As stated in Note 12, "Subsequent Events," the City extended the agreement on September 11, 2019. This ordinance reauthorized the agreement for another year, to October 3, 2020. No Inferior Lien bonds have been issued.

**Pledged Revenues**

The Fund has pledged airport system revenues, net of operation and maintenance expenses, to pay principal and interest on outstanding Senior Lien Commercial Paper Notes, Senior Lien Revenue Bonds, Subordinate Lien Revenue Bonds, and any Inferior Lien Bonds, with outstanding principal amounts of \$48.5 million, \$0 million, \$1,935.5 million and \$0 million respectively at June 30, 2019. The Commercial Paper Notes and Revenue Bonds are issued to establish, improve, enlarge, extend and repair the Airport System. An Inferior Lien Sublease Agreement with United Airlines paid debt service on the Airport System Special Facilities Bonds, (Automated People Mover Project) Series 1997A until their final maturity on July 15, 2017.

Pledged airport system revenues exclude: proceeds of any bonds, replacement proceeds, or any investment income earned by bond proceeds; fair value adjustments to investment income; passenger facility charges; grants or gifts for construction or acquisition; insurance proceeds; revenue from special facilities pledged to Special Facility Bonds; taxes collected for others; and proceeds from the sale of property. Pledged airport system revenues, net of operation and maintenance expense, totaled \$193.0 million in Fiscal Year 2019, covering principal of \$80.1 million and interest of \$96.2 million. In addition to pledged airport system revenue, passenger facility charges totaling \$60.6 million were available to pay debt service in Fiscal Year 2019, making the ratio of net pledged revenue to cover debt service costs 1.67%.

**Special Facility Bonds**

The Airport System Special Facilities Taxable Revenue Bonds, (Consolidated Rental Car Facility Project), Series 2001, original par value \$130,250,000, financed the design and construction at Intercontinental of a common car customer service building, a parking structure, maintenance, storage and administrative facilities for each car rental company lessee, a common bus fleet and maintenance facility, and related infrastructure. The City holds legal title to the completed Consolidated Rental Car Facility (CRCF), as it was constructed on airport property, but the facility is operated and maintained by IAH RACS, LLC, a limited liability company formed by various car rental companies. The bonds are payable from customer facility charges collected by the car rental companies from their customers and remitted to a trustee for payment of debt service and other uses allowable by a trust indenture. As of June 30, 2019, the daily usage charge per customer is set at \$4.00. The trust indenture determines when and how the City is responsible for changing the rate, which under the Bond covenants must be set to provide a debt service coverage ratio of at least 125%. The bonds are limited special obligations of the City, payable solely from and secured by pledged customer facility charges. There is no pledge of the car rental companies' revenues, or against any general revenue of the City or Fund.

On September 4, 2014, the City issued \$38,225,000 in Airport System Special Facilities Taxable Revenue Refunding Bonds (Consolidated Rental Car Facility Project), Series 2014, at coupons ranging from 6.49% to 7.13%. The stated interest rate was 3.117%. The bonds mature in varying amounts from 2015 to 2021. Proceeds of the bonds were used to refund \$37,245,000 of the City's outstanding Airport System Special Facilities Taxable Revenue Bonds (CRCF), Series 2001, and to pay costs of issuance. Net present value savings related to the refunded bonds totaled \$5,078,199 or 13.63% of the refunded bonds and reduced total debt service by \$6,110,108. The bonds are limited special obligations of the City, payable solely from and secured by pledged customer facility charges. These bonds do not constitute a debt or pledge of the faith or credit of the City or the Fund.

## NOTES TO THE FINANCIAL STATEMENTS

**5. Long-Term Liabilities, continued:**

In reporting periods prior to FY2015, the Airport Fund elected not to report the CRCF facility or the Special Facility Revenue Bonds (CRCF) on its financial statements, under the Governmental Accounting Standards Board guidance for conduit debt obligations. Beginning in the fiscal year ended June 30, 2015, the Airport Fund elected to change its method of accounting, and to report the CRCF assets, revenues, and associated debt and expenses, with retroactive adjustments on comparative data. At June 30, 2019 and June 30, 2018, special facilities revenue and refunding bonds (CRCF) outstanding totaled \$80.4 million and \$86.1 million, respectively.

**Pension Obligation Bonds**

On December 22, 2017, the City issued City of Houston Pension Obligation Bonds, Series 2017 (Taxable), with a par value of \$1,005,145,000, and a lien against the general revenues of the City, including ad valorem tax. Although there was no direct lien against Airport System Fund revenues, the Airport System Fund was assigned the responsibility to pay principal and interest on a portion of the pension obligation bonds with a par value of \$27,610,000, a coupon rate of 2.203%, and a final maturity on March 1, 2019, along with related costs of issuance. The Airport System Fund has previously been assigned the responsibility to pay principal and interest on a portion of the City of Houston Pension Obligation Bonds, Series 2005 (Taxable), with a par value of \$2,005,656, a coupon rate of 5.31%, and a final maturity on March 1, 2035.

**Note Payable**

In February of 2013, the City entered into a contract with Southwest Airlines Co. ("Southwest") under which Southwest would construct five international gates, a Federal Inspection Service Facility, and associated enabling projects (the "Project") at William P. Hobby Airport. Southwest was responsible for the initial funding of all costs of the Project including any related financing costs. Title to the Project was passed to the City at each point in construction. The new gates and FIS Facility opened on October 15, 2015. The Airport Fund recorded an initial note payable to Southwest Airlines of \$123,785,000, for its interest in the Project, to be amortized at a 2.19% rate over a 25-year period, with a final maturity at June 30, 2040. Amortization amounts were used to offset lease revenue owed by Southwest Airlines for the use of the Project facilities, and to record interest expense on the note. The balance of the outstanding note payable on June 30, 2017 was recorded as \$115,421,000.

On November 15, 2017, City Council authorized the issuance of Airport System Revenue Bonds to buyout Southwest Airlines' remaining interest in the Project. Southwest Airlines and the City agreed on a revised amortization schedule, with a final unamortized note principal balance of \$115,882,000 as of November 15, 2017. The Airport Fund paid this balance to Southwest Airlines on March 20, 2018, from the proceeds of Airport System Subordinate Lien Revenue and Refunding Bonds, Series 2018A (AMT).

## NOTES TO THE FINANCIAL STATEMENTS

**6. Defined Benefit Pension Plan**

As a department of the City, the Houston Airport System Fund participates in the pension plan of the City of Houston's municipal employees, for which separately published financial statements are available. Since the plan does not separately account for the Fund, the following disclosures generally relate to the City as a whole. A complete copy of the summary plan description and the stand-alone financial reports can be obtained from the Houston Municipal Employees Pension System at 1201 Louisiana St., Suite 900, Houston, Texas 77002-2555 or via <http://hmeps.org>.

**A. General Information****Plan Description**

The Houston Municipal Employees' Pension System (HMEPS) of the City is a single employer defined benefit pension plan that covers all eligible municipal employees, including all employees of the Fund. This pension plan was established under the authority of Texas statutes (Vernon's Texas Civil Statutes, Article 6243g), which establish the various benefit provisions. An independent Board of Trustees administers each plan. The fiscal year of each pension fund ends June 30. In this CAFR, the Fund reports separately from the City and is required to report as a cost-sharing plan since it is allocated a proportionate share of the Houston Municipal Employees Pension System liability. The schedules of Net Pension Liability, Pension Expense, and Deferred Outflows and Inflows of Resources show the Fund's cost share of the City's plan.

**Benefits Provided**

The Houston Municipal Employees' Pension System includes three contributory groups and provides for service-connected disability and death benefits to eligible members and surviving spouse and/or dependents, with no age or service eligibility requirements. Pension benefits are based on a participant's average monthly salary and years of debited service, as defined in the Pension Statute. Pension benefits are adjusted annually for a fixed cost of living adjustment of 3% for eligible recipients. The maximum pension benefit is 90% of the participant's average monthly salary. A Deferred Retirement Option Plan (DROP) is available to eligible members.

**Contributions**

For the Houston Municipal Employees' Pension System, employer and employee obligations to contribute, as well as employee contribution rates, are included in the enabling pension statutes, and some requirements are delineated in an amended and restated meet and confer agreement, effective July 1, 2011. Additionally, these laws provide that employer funding be based on periodic actuarial valuations, statutorily approved amounts or, in the cases of the Municipal Employees' Pension System, amounts agreed to in meet and confer agreements. The employer contribution rate is a percentage of base salary which was 8.27% for fiscal year 2019 and 27.96% for fiscal year 2018. All pension plans provide service, disability, death, and survivor benefits. In addition, each pension plan recognizes participant and employer contributions as revenues in the period in which they are due pursuant to formal commitments and recognizes benefits and refunds when they are due and payable in accordance with the terms of the pension statutes.

As of most recent measurement date of the net pension liability, membership data for the pension plan are as follows:

Retirees and beneficiaries	
currently receiving benefits	10,834
Former members entitled to	
benefits but not yet receiving them	6,044
Former members - not entitled to benefits	-
Active members:	
Vested	11,880
Non-vested	-
Total participants	<u>28,758</u>

Houston Airport System • For fiscal years ended June 30, 2019 and 2018



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

6. **Defined Benefit Pension Plan, continued:****B. Net Pension Liability**

The Airport System Fund's liability for the net pension liability in the City's pension plan was allocated and reported on the statement of net position.

The "Net Pension Liability" (NPL) is the difference between the "Total Pension Liability" (TPL) and the plan's "Fiduciary Net Position" (FNP). The TPL is the present value of pension benefits that are allocated to current members due to past service by entry age normal actuarial cost method. The TPL includes benefits related to projected salary and service, and automatic cost of living adjustments (COLA's). In addition, ad hoc COLA's are also included in the TPL to the extent they are substantively automatic. The FNP is determined on the same basis used by the pension plans. The City's net pension liability and certain sensitivity information are based on an actuarial valuation performed as of July 1, 2018. The total pension liability was rolled forward from that valuation date to the measurement date of June 30, 2019 using generally accepted actuarial principles. A schedule of Net Pension Liability, in addition to the information above, includes multi-year trend information (beginning with fiscal year 2015) and is presented in the Required Supplementary Information section.

**Net Pension Liability (in thousands)**

Measurement Date	June 30, 2019		June 30, 2018	
	Municipal Employees' Pension	The Fund's proportionate share of NPL	Municipal Employees' Pension	The Fund's proportionate share of NPL
Total Pension Liability	\$ 5,236,133	\$ 563,449	\$ 5,113,358	\$ 555,982
Less: Fiduciary Net Position	(3,100,999)	(333,692)	(2,988,864)	(324,983)
Net Pension Liability	<u>\$ 2,135,134</u>	<u>\$ 229,757</u>	<u>\$ 2,124,494</u>	<u>\$ 230,999</u>

The Fund's proportionate percentage of NPL is 10.76% and 10.87% for fiscal years 2019 and 2018.

**C. Schedule of Changes in Net Pension Liability (in thousands)**

	June 30, 2019			June 30, 2018		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Service Cost	\$ 77,175	\$ -	\$ 77,175	\$ 78,149	\$ -	\$ 78,149
Interest on the Total Pension Liability	349,593	-	349,593	341,276	-	341,276
Difference between Expected and Actual Experience	(11,538)	-	(11,538)	19,158	-	19,158
Employer Contributions	-	176,261	(176,261)	-	421,562	(421,562)
Employees Contributions	-	32,537	(32,537)	-	27,905	(27,905)
Pension Plan Net Investment Income	-	200,445	(200,445)	-	231,815	(231,815)
Benefit Payments	(291,061)	(291,061)	-	(283,928)	(283,928)	-
Refunds	(1,394)	(1,394)	-	(807)	(807)	-
Administrative Expense	-	(5,363)	5,363	-	(6,443)	6,443
Other	-	710	(710)	-	(3,905)	3,905
Net Change	122,775	112,135	10,640	153,848	386,199	(232,351)
Net Pension Liability Beginning	<u>5,113,358</u>	<u>2,988,864</u>	<u>2,124,494</u>	<u>4,959,510</u>	<u>2,602,665</u>	<u>2,356,845</u>
Net Pension Liability Ending	<u>\$ 5,236,133</u>	<u>\$ 3,100,999</u>	<u>\$ 2,135,134</u>	<u>\$ 5,113,358</u>	<u>\$ 2,988,864</u>	<u>\$ 2,124,494</u>

The Fund participated in the December 22, 2017 issuance of Houston Pension Obligation Bonds, Series 2017 in the amount of \$27,610,000 which is reflected in Employer contributions. These bonds matured in March 2019. For further information, see Note 5, Long Term Liabilities, Pension Obligation Bonds.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

6. **Defined Benefit Pension Plan, continued:****D. Pension Expense**

For the years ended June 30, 2019 and June 30, 2018, the City recognized pension expense as follows (in thousands):

	<u>June 30, 2019</u>	<u>June 30, 2018</u>
<b>Changes for the year:</b>		
Service Cost	\$ 77,175	\$ 78,149
Interest	349,593	341,276
Difference between Expected and Actual Experience	149,067	146,476
Differences between Projected and Actual Earnings on plan investments	24,302	23,166
Member Contributions	(32,536)	(27,905)
Net Investment Income	(206,130)	(187,590)
Administrative Expense	5,363	6,442
Assumption Changes	-	-
Other	(710)	3,905
Total Pension Expense	<u>\$ 366,124</u>	<u>\$ 383,919</u>

The Fund's proportionate shares of pension expenses are \$34.0 million and \$38.7 million for June 30, 2019 and June 30, 2018, respectively.

**E. Schedule of Deferred Outflows and Inflow of Resources**

Deferred outflows of resources and deferred inflows of resources by source reported by the Fund at June 30, 2019 and June 30, 2018 (in thousands).

	<u>June 30, 2019</u>			<u>June 30, 2018</u>		
	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Total HMEPS</u>	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>	<u>Total HMEPS</u>
Differences between expected actual experience	\$ -	\$ 1,108	\$ (1,108)	\$ 1,071	\$ 195	\$ 876
Changes of assumptions	17,720	-	17,720	23,037	-	23,037
Net difference between projected and actual earnings on pension plan investments	-	4,692	(4,692)	6,727	905	5,822
Total	<u>\$ 17,720</u>	<u>\$ 5,800</u>	<u>\$ 11,920</u>	<u>\$ 30,835</u>	<u>\$ 1,100</u>	<u>\$ 29,735</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions at June 30, 2019 for the Fund will be recognized in pension expense as follows (in thousands):

<b>Year ended June 30:</b>	
2020	\$ 15,823
2021	(2,814)
2022	(1,225)
2023	136
2024	-
Thereafter	-
Total	<u>\$ 11,920</u>

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## NOTES TO THE FINANCIAL STATEMENTS

6. **Defined Benefit Pension Plan, continued:**F. **Sensitivity of the net pension liability to changes in the discount rate**

The following presents the net pension liability for Municipal Employees' Pension plan, calculated using the current discount rate, as well as what the Fund's net pension liability would have been if they were calculated using a discount rate that is 1-percent-point lower and 1-percent-point higher than the current rate (in thousands):

	1% Decrease	Current Discount Rate	1% Increase
	6.00%	7.00%	8.00%
Municipal Employees' Pension	\$ 2,701,000	\$ 2,135,134	\$ 1,662,160
The Fund's proportionate share of NPL	\$ 290,649	\$ 229,757	\$ 178,861

G. **Schedule of Assumptions**

Inflation	2.25%
Salary changes	3.00% to 5.25%
Investment rate of return	7.00%
Valuation Date	7/1/2018
Actuarial Cost Method	Entry Age Normal Cost
Amortization Method	Level Percent of Payroll
Amortization Period	29 years
Asset Valuation Method	5 Year Smoothed, direct offset of deferred gains and losses
Ad hoc OPEB and Ad hoc COLA	3% to 6%
Mortality assumption	RP-2000 Table scaled by 125% for males and 112% for females

7. **Other Employee Benefits****Retiree Health Insurance Benefits**

Pursuant to a City Ordinance, the City provides certain health care benefits for retired employees. Substantially all employees become eligible for these benefits if they reach normal retirement age while working for the City. Contributions are recognized in the year paid. The cost of retiree health care premiums incurred by the City (employer and subscriber) amounted to approximately \$95,170,571 and \$89,413,859 for the years ended June 30, 2019 and June 30, 2018, respectively. Retiree health care is accounted for in the Health Benefits Fund, an Internal Service Fund for the City. At June 30, 2019, there were 11,606 retirees including active survivors eligible to receive benefits. Effective August 1, 2011, all Medicare Eligible Retirees must enroll in an insured Medicare Advantage Program Plan.

The City of Houston OPEB plan is a single-employer plan, and calculations are based on the OPEB benefits provided under the terms of the plan in effect at the time of each valuation and on the pattern of sharing of costs between the employer and plan members to that point. As a department of the City of Houston, the Airport System Fund participates in the OPEB plan of the City of Houston's municipal employees. A separate accounting is not done for the Fund's portion. It is allocated its share of expense on an annual basis.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. **Other Employee Benefits, continued:****Actuarially Determined Contribution and Total OPEB Liability**

The Annual OPEB Cost associated with the City's retiree health care costs for the current year is as follows (in thousands):

Actuarially Determined Contribution before Timing Adjustment	\$ 132,172
Timing Adjustment (3% payroll increase)	1,789
Actuarially Determined Contribution	<u>133,961</u>
Contribution made	57,100
Net OPEB liability before Timing Adjustment	2,438,572
Timing Adjustment	<u>(184,383)</u>
Net OPEB liability, end of year	<u><u>2,254,189</u></u>
HAS Portion of Net OPEB Liability, end of the year	<u><u>\$ 73,286</u></u>

	Fiscal Year Ended June 30	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Liability
City	2018	\$ 166,044	23.98%	\$ 2,438,572
City	2019	\$ 103,249	55.30%	\$ 2,254,189
HAS	2018	\$ 5,611	26.96%	\$ 89,450
HAS	2019	\$ 10	2278%	\$ 73,286

A. **Retiree Health Insurance Benefits**

## 1. Membership

As of the most recent actuarial valuation of the net OPEB liability, membership data is as follows:

	City	HAS
Retirees and beneficiaries currently receiving benefits	<u>10,053</u>	<u>479</u>
Active members:	21,696	1,086
Total participants	<u><u>31,749</u></u>	<u><u>1,565</u></u>

## 2. Net OPEB Liability

The Net OPEB liability was measured as of June 30, 2018. The Total OPEB Liability was determined from an actuarial valuation as of July 1, 2018. The Net OPEB Liability is the Total OPEB Liability less the Plan Fiduciary Net Position. The Total OPEB Liability is the present value of all future benefit payments for current retirees and active employees, considering assumptions about demographics, turnover, mortality, disability, retirement, health care trends, and other actuarial assumptions.

Net OPEB Liability (in thousands)		
Measurement Date: June 30, 2018		
Reporting Date: June 30, 2019		
	City	HAS
Total OPEB Liability	\$ 2,254,189	\$ 73,286
Less: Fiduciary Net Position	-	-
Net OPEB Liability	<u><u>\$ 2,254,189</u></u>	<u><u>\$ 73,286</u></u>

A schedule of Net OPEB Liability, in addition to the information above, includes multi-year trend information (beginning with year 2018) and is presented in the Required Supplementary Information section.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. **Other Employee Benefits, continued:**

## 3. Schedule of Changes in Net OPEB Liability

Change in Net OPEB Liability (in thousands)	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability	HAS Net OPEB Liability
Service Cost	\$ 110,793	\$ 57,100	\$ 53,693	\$ 4,707
Interest	90,245	-	90,245	7,911
Change of benefit terms	(5,007)	-	(5,007)	(439)
Difference between Expected and Actual Experience	(99,153)	-	(99,153)	(8,692)
Assumptions Changes	(224,161)	-	(224,161)	(19,651)
Benefit Payments	(57,100)	(57,100)	-	-
Net Change	(184,383)	-	(184,383)	(16,164)
Net OPEB Liability Beginning	2,438,572	-	2,591,912	89,450
Net OPEB Liability Ending	<u>\$ 2,254,189</u>	<u>\$ -</u>	<u>\$ 2,407,529</u>	<u>\$ 73,286</u>

## 4. OPEB Expense

For the reporting year ended June 30, 2019, the City recognized OPEB expense of \$103,249. The Fund recognized \$9,706. OPEB expense recognized is as follows (in thousands):

**Components of OPEB Expense:**

	City	HAS
Service Cost	\$ 110,793	\$ 10
Interest	90,245	8
Current-period benefit changes	(5,007)	0
Difference between Expected and Actual Experience	(14,165)	(1)
Recognition Deferred	(46,594)	(4)
Expensed Portion of Current Period Changes in Assumptions	(32,023)	(3)
OPEB Expense	<u>\$ 103,249</u>	<u>\$ 10</u>

## 5. Schedule of Deferred Outflows and Inflows of Resources

Deferred outflows of resources and deferred inflows of resources are differences between actual and expected experience that are not reflected in current year's expenses. Deferred inflows and outflows of resources related to OPEB reported by the City and by the Fund at June 30, 2019 are as follows (in thousands):

	OPEB Liability (in thousands)			
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
	City		HAS	
Changes of assumptions	\$ -	\$ 367,430	\$ -	\$ 18,959
Difference between expected and actual experience in the Total OPEB Liability	-	142,667	-	7,362
Total	<u>\$ -</u>	<u>\$ 510,097</u>	<u>\$ -</u>	<u>\$ 26,321</u>

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. **Other Employee Benefits, continued:**

Amounts reported as deferred outflows of resources and deferred inflows of resources related to the Net OPEB Liability at June 30, 2019 will be recognized in OPEB expense as follows (in thousands):

	City	HAS
Year ended June 30:		
2020	(92,782)	(4,387)
2021	(92,782)	(4,387)
2022	(92,782)	(4,387)
2023	(92,782)	(4,387)
2024	(92,782)	(4,387)
2025	(46,187)	(4,386)
Total	<u>\$ (510,097)</u>	<u>\$ (26,321)</u>

## 6. Sensitivity of the Net OPEB Liability to changes in the discount rate

The following presents the Net OPEB Liability, calculated using the discount rate, as well as what the City's Net OPEB Liability would have been if it were calculated using a discount rate that is 1 percentage point lower and 1 percentage point higher than the current rate (in thousands):

		1% Decrease 2.87%	Current Dis- count Rate 3.87%	1% Increase 4.87%
City	Net OPEB Liability	\$ 2,627,916	\$ 2,254,189	\$ 1,954,903
HAS	Net OPEB Liability	\$ 85,436.25	\$ 73,286	\$ 76,681

## 7. Schedule of Assumptions

The Total OPEB Liability is based on an actuarial valuation as of July 1, 2018 using the following assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.25%
Salary Increases	2.75% to 22.75%, varies by employee class and service/age
Discount Rate	3.87%
Measurement Date	30-Jun-18
Healthcare costs trends rates	
Medicare	6.00% trending down to 4.5%
Other Medical	7.50% trending down to 4.5%
Prescription drug	9.00% trending down to 4.5%
Administrative costs	2.00%
Healthy Mortality Rates	RP-2000 Combined Healthy Mortality Table for males and females

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. Other Employee Benefits, continued:B. **Health Benefits Internal Service Fund**

Effective May 1, 2011, the City elected to be substantially self-insured and on May 1, 2019 once again awarded CIGNA a five-year contract with two (2) one-year renewal options for 3 new health plans. All have a heavy emphasis on a wellness component, and include: 1) a limited network HMO-type plan, 2) an open access PPO-type plan with out-of-network coverage, 3) a consumer driven high deductible health plan partnered with a health reimbursement account, and 4) a specific plan for retirees, mostly those under age 65, who live outside the limited network service area but who live in Texas. Effective May 1, 2013, the City no longer purchases individual and aggregate stop-loss coverage. The City has assumed the financial risk of catastrophic and overall claim liability. The plan is administered by CIGNA.

Premiums paid (employer and subscriber) for current employees to third party administrators including claim liability totaling \$256,964,014 and \$253,198,575 for the years ended June 30, 2019 and June 30, 2018, respectively.

The changes in the actuarial estimate of claims liability for the City related to the CIGNA plans are as follows (in thousands):

	CIGNA Schedule of Changes in Liability (in thousands)	
	June 30, 2019	June 30, 2018
Beginning actuarial estimate of claims liability, July 1	\$ 23,067	\$ 19,136
Catastrophic claim reserve, July 1	15,000	13,000
Additional increase to Catastrophic claims reserve, August 2018	-	2,000
Incurred claims for fiscal year	312,477	295,713
Payments on claims - net of RX rebates and refunds	(312,710)	(296,573)
Actuarial adjustment	116	4,791
Ending actuarial estimate of claims liability, June 30	<u>\$ 37,950</u>	<u>\$ 38,067</u>

The City also provides one times the salary of basic life insurance, with a minimum of \$15,000, at no cost to the employee. The employee, at no cost to the City, may then obtain additional life insurance up to four times his or her annual salary. The current costs for active employees for both basic and voluntary life insurance totaled \$6,224,962 and \$6,158,748 for the years ended June 30, 2019 and June 30, 2018, respectively.

C. **Incurred for Catastrophic claims**

In addition to the IBNR, to mitigate claim volatility the City has funded a catastrophic claim liability of \$15 million. This would increase the total liability to \$38 million and designated fund balance of \$37 million for claim volatility.

D. **Long-Term Disability Plan (LTD)**

The long-term disability plan, accounted for as an internal service fund of the City, is a part of the Income Protection Plan implemented effective September 1, 1985 (renamed the Compensable Sick Leave Plan (CSL) in October 1996) and is provided at no cost to City employees who are CSL members. Coverage is effective upon completion of one year of continuous service. When an employee cannot work because of injury or illness, the plan provides income equal to 50% of base pay plus longevity, or 70% of base pay plus longevity when combined with income benefits available from other sources. Plan benefits may be payable after all CSL scheduled sick leave benefits, including frozen sick leave days, have been used, however, not before six months of absence from work. The plan is administered by Reed Group (previously Hewitt Associates LLC), which is reimbursed by the internal service fund for claims as they are paid plus an administrative services fee. As a department of the City of Houston, the Airport System Fund participates in the OPEB-LTD plan for the City of Houston's municipal employees. A separate accounting is not done for the Fund's portion. It is allocated its share of expense on an annual basis.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. Other Employee Benefits, continued:

	Schedule of Changes in City Liability (in thousands)	
	June 30, 2019	June 30, 2018
Beginning actuarial estimate of claims liability, July 1	\$ 5,990	\$ 8,184
Incurred claims for fiscal year	1,510	1,481
Payments on claims - net of RX rebates and refunds	(957)	(976)
Actuarial adjustment	177	(2,699)
Ending actuarial estimate of claims liability, June 30	<u>\$ 6,720</u>	<u>\$ 5,990</u>

**Actuarially Determined Contribution and Total Liability**

During fiscal year 2019, there was a decrease of \$730 thousand in the amount of disabled life reserves.

Total claim liability at beginning of period	\$ 5,990
Changes due to assumption changes	126
Increase attributable to additions	1,337
Decrease attributable to terminations	(324)
Change attributable to passage of time and adjustments	(409)
Net change	<u>\$ 730</u>
Total claim liability at end of period	<u>\$ 6,720</u>

	Fiscal Year Ended June 30	Annual OPEB Cost	Percentage of Annual OPEB Cost Contributed	Net OPEB Liability
City	2018	\$ 1,092	89.29%	\$ 11,040
City	2019	\$ 1,329	72.01%	\$ 12,902
HAS	2018	\$ 45	89.70%	\$ 457
HAS	2019	\$ 92	72.19%	\$ 586

## 1. Changes in Net OPEB Liability

	Increase (Decrease)			
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability (NPL)	HAS Portion
Balance at 06/30/2018	\$ 11,040	\$ -	\$ 11,040	\$ 502
Changes for the year				
Service Cost	776	-	776	35
Interest	409	-	409	19
Experience	1,369	-	1,369	62
Employer Contributions	-	957	(957)	(44)
Benefit Payments	(947)	(947)	-	-
Assumption Changes	255	-	255	12
Net Changes	<u>1,862</u>	<u>10</u>	<u>1,852</u>	<u>84</u>
Balance at 06/30/2018	<u>\$ 12,902</u>	<u>\$ 10</u>	<u>\$ 12,892</u>	<u>\$ 586</u>

## 2. OPEB LTD Expense Components

	City	HAS
Service Cost	\$ 776	\$ 54
Interest on TOL	409	28
Differences between expected and actual experience	134	9
Changes in Assumptions	10	1
Total OPEB Expense	<u>\$ 1,329</u>	<u>\$ 92</u>

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. **Other Employee Benefits, continued:**

For the year ended June 30, 2019, the City will recognize OPEB expense of \$1,328,625. At June 30, 2019, the City reports deferred outflows of resources and deferred inflows of resources related to OPEB expense from the following sources:

## 3. Deferred Outflows of Resources and Deferred Inflows of Resources

	City		HAS	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ 1,234	\$ 12	\$ 81	\$ 1
Changes in assumptions	230	127	15	5
	<u>\$ 1,464</u>	<u>\$ 139</u>	<u>\$ 96</u>	<u>\$ 6</u>

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

	Deferred Outflows and Inflows of Resources	
	City	HAS
Year ended June 30:		
2020	\$ 144	\$ 10
2021	144	10
2022	144	10
2023	144	10
2024	144	10
Thereafter	605	40
Total	<u>\$ 1,325</u>	<u>\$ 90</u>

## 4. Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

The following presents the net OPEB liability, calculated using the discount rate of 3.50%, as well as what the net OPEB 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 (in thousands):

	1% Decrease 2.50%	Current Discount Rate of 3.50%	1% Decrease 4.50%
City Net OPEB-LTD Liability	\$ 13,602	\$ 12,892	\$ 12,221
HAS Net OPEB-LTD Liability	\$ 618	\$ 586	\$ 556

E. **Deferred Compensation Plan**

The City offers its employees a deferred compensation plan (Plan), created in accordance with Internal Revenue Code Section 457 as a separately administered trust. The Plan, available to all City employees permits employees to defer a portion of their salary until future years. The deferred compensation funds are not available until termination, retirement, death or unforeseeable emergency. However, the Plan now offers loans to participant employees. The maximum loan amount is the lesser of \$50,000 or 50% of the total account balance, less any outstanding loans. The minimum loan amount is \$1,000. Pursuant to tax law changes, the Plan's assets are no longer subject to the City's general creditors and are not included in these financial statements.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

7. **Other Employee Benefits, continued:****F. Workers' Compensation Self-Insurance Plan**

The City has established a Workers' Compensation Self-Insurance Plan, accounted for within the various operating funds. The plan is administered by Tristar Insurance Group, Inc. Funds are wire transferred to Tristar as needed to pay claims.

At June 30, 2019, the City has an accumulated liability in the amount of \$99 million covering estimates for approved but unpaid claims and incurred but not reported claims (calculated on an actuarial basis) recorded in the government-wide Statement of Net Position and Enterprise Funds. The amount of liability is based on an actuarial study. The accumulated liability at June 30, 2018 was \$88 million.

	Schedule of Changes in Liability (in thousands)	
	June 30, 2019	June 30, 2018
Beginning actuarial estimate of claims liability, July 1	\$ 87,502	\$ 61,244
Incurred claims for fiscal year	19,984	13,220
Payments on claims	(20,387)	(16,832)
Actuarial adjustment	11,635	29,870
Ending actuarial estimate of claims liability, June 30	\$ 98,734	\$ 87,502

8. **Transactions with City of Houston****Interfund Services**

The City charges the Fund for certain services performed by other City funds on behalf of the Airport System Fund. Such charges were as follows for the years ended June 30, 2019 and 2018 (in thousands):

	June 30, 2019	June 30, 2018
Police services	\$ 31,955	\$ 29,690
Fire services	21,545	20,145
Indirect support services	3,194	3,211
Water and sewer services	3,691	3,605
Other	10,522	10,964
Total	\$ 70,907	\$ 67,615

Indirect costs are incurred in connection with the general administration of City affairs, which cannot be directly associated with specific funds. Such costs include finance, materials management, legal, human resources, and administration. These costs are allocated to the Fund each year based on an annual indirect cost study.

The Fund also pays for services provided by other City departments and funds, including the Combined Utility Fund for water and wastewater services and the internal service funds for risk financing activities.

In Fiscal year 2017 HAS started performing administrative work for vendors seeking airport related permits. Per an Memorandum of Understanding entered into between HAS and Houston Public Works (HPW), HAS began to receive proceeds from permitting revenues from HPW. HAS was reimbursed \$443,706 and \$508,325 in permitting fees as a result of this agreement for the years ended June 30, 2019 and 2018, respectively.

**Due to and Due from the City of Houston**

Amounts due to and due from other funds of the City at June 30, 2019 and 2018 are as follows (in thousands):

	June 30, 2019		June 30, 2018	
	Due to	Due From	Due to	Due From
General Fund	\$ 247	\$ 485	\$ 394	\$ 276
Special Revenue Fund	-	1	-	-
Total	\$ 247	\$ 486	\$ 394	\$ 276

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

9. **Major Customers**

In fiscal year 2019, the Fund earned 41.1% of its operating revenues from two major customers, United Continental Holdings, Inc. and Southwest Airlines Company. No other company represents more than 2.2% of revenue. The two major companies and their respective percentage of revenue are as follows:

	Percentage of Operating Revenue	
	2019	2018
United Continental Holdings, Inc.	33.0%	33.7%
Southwest Airlines Co.	8.1%	8.2%

10. **Conduit Debt**

The City has authorized various issues of Special Facilities Bonds to enable United Airlines, Inc. (successor to Continental Airlines, Inc.) a private company, to construct facilities at Intercontinental that were deemed to be in the public interest (Special Facilities). These bonds are limited special obligations of the City, payable solely from and secured by a pledge of revenues generated from lease agreements with United Airlines. Collected pledged revenues are remitted directly to a trustee by United Airlines. Under the terms of the related lease agreements, United Airlines operates, maintains, and insures the terminal, and manages and retains revenues from all concessions operated in the Terminal B and E Special Facilities. The City operates, maintains, insures, and manages and retains revenues from all concessions operated in all other terminal facilities.

The City holds legal title to the completed facilities, as they are constructed on airport property, but the constructed facilities are operated and controlled by private companies through long-term leases, and the Fund will enjoy no direct financial benefit from these facilities for the term of the lease agreements. Accordingly, the Fund accounts for the United Airlines' Special Facilities Bonds shown in the following table as conduit debt, and neither the debt nor the related assets have been recorded in the accompanying financial statements.

**Conduit debt outstanding at June 30, 2019 and 2018 (in thousands):**

	June 30, 2019	June 30, 2018
Airport System Special Facilities Revenue Bonds (Continental Airlines, Inc. Terminal Improvement Projects), Series 2011 (AMT), \$113,305,000 original principal, matures in 2038	\$ 113,305	\$ 113,305
Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal E Project), Series 2014 (AMT), \$308,660,000 original principal, matures in 2029	308,660	308,660
Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Terminal Improvement Projects), Series 2015B-1 (AMT), \$176,650,000 original principal, matures in 2035	176,650	176,650
Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal Improvement Projects), Series 2015B-2 (AMT), \$47,390,000 original principal, matures in 2020	47,390	47,390
Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Airport Improvement Projects), Series 2015C (AMT), \$65,785,000 original principal, matures in 2020	65,785	65,785
Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Technical Operations Center), Series 2018 (AMT), \$90,650,000 original principal, matures in 2028	90,650	90,650
Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Airport Improvement Projects), Series 2018C (AMT), \$46,425,000 original principal, matures in 2028	46,425	46,425
<b>Total conduit debt outstanding</b>	<b>\$ 848,865</b>	<b>\$ 848,865</b>

On February 20, 2018, the City issued \$90,650,000 in Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Technical Operations Center Project), Series 2018 (AMT) on behalf of United Airlines, to finance the construction of a technical operations center and related facilities at the George Bush Intercontinental Airport. The bonds were issued as a 5% Term Bond due July 15, 2028, with a yield of 3.60%.

## NOTES TO THE FINANCIAL STATEMENTS

**10. Conduit Debt Obligations, continued:**

On February 20, 2018, the City issued \$46,425,000 in Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Airport Improvement Projects), Series 2018C (AMT) on behalf of United Airlines, to finance the improvement, renovation, expansion and repair of certain special facilities at George Bush Intercontinental Airport, including improvements to an existing aircraft maintenance hangar facility, construction of an aircraft shops facility, and renovation of a maintenance and parts storage facility. The bonds were issued as a 5% Term Bond due July 15, 2028, with a yield of 3.60%. On March 16, 2015, the City issued \$176,650,000 in Airport System Special Facilities Revenue Bonds (United Airlines, Inc. Terminal Improvement Projects), Series 2015B-1 (AMT) on behalf of United Airlines, to finance the construction of a new North Concourse building at Terminal B with jet bridge loading, and to make improvements to related facilities. The bonds were issued with a coupon rate of 5.00%, and a yield of 4.75%, to mature in varying amounts from 2026 to 2035.

The Airport System Special Facilities Revenue Bonds, (Continental Airlines, Inc., Terminal Improvement Projects) Series 1997B and 1998B financed various leasehold improvements for United Airlines in Terminals B, C and D. On March 16, 2015, the City issued \$47,390,000 in Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal Improvement Projects), Series 2015B-2 (AMT) on behalf of United Airlines, with a 5.00% coupon rate, to mature on July 15, 2020. Proceeds of the bonds were used to refund the outstanding Airport System Special Facilities Revenue Bonds, Series 1997B and 1998B and to pay costs of issuance. Net present value savings for United Airlines related to the refunded bonds totaled \$12,049,244 or 18.36% of the refunded bonds and reduced total debt service by \$45,281,400.

The Airport System Special Facilities Revenue Bonds, (Continental Airlines, Inc., Airport Improvement Projects) Series 1997C and 1998C, financed the construction of an aircraft hangar, maintenance and parts storage facility, mail sort facility, flight simulator, and inflight training facility. On March 26, 2015, the City issued \$65,785,000 in Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Airport Improvement Projects), Series 2015C, on behalf of United Airlines, with a coupon rate of 5.00%, to mature on July 15, 2020. Proceeds of the bonds were used to refund the outstanding Airport System Special Facilities Revenue Bonds, Series 1997C and 1998C, and to pay costs of issuance. Net present value savings for United Airlines related to the refunded bonds totaled \$14,553,627 or 20.95% of the refunded bonds and reduced total debt service by \$40,135,502.

The Airport System Special Facilities Revenue Bonds, (Continental Airlines, Inc. Terminal E Project), Series 2001, financed the construction of international Terminal E and related airport facilities for the exclusive use of United Airlines (Terminal E Special Facilities). On May 8, 2014, the City issued \$308,660,000 in Airport System Special Facilities Revenue Refunding Bonds (United Airlines, Inc. Terminal E Project) Series 2014 on behalf of United Airlines, at coupon rates ranging from 4.50% to 5.00%. The bonds mature in varying amounts from 2020 to 2029. Proceeds of the bonds were used to refund a portion of the City's outstanding Airport System Special Facilities Revenue Bonds (Continental Airlines, Inc. Terminal E project) Series 2001 and to pay costs of issuance. Net present value savings for United Airlines related to the refunded bonds totaled \$40,519,909 or 13.31% of the refunded bonds and reduced total debt service by \$58,675,823.

The Airport System Special Facilities Revenue Bonds (Continental Airlines, Inc. Terminal Improvement Projects), Series 2011 (AMT) financed the replacement of two flight stations at Terminal B with a new South Concourse building to serve United Airlines' regional jet operations (Terminal B Special Facilities). The Terminal B Special Facilities went into service in March 2014.

**11. Commitments and Contingencies****Litigation and Claims**

The City is the defendant in various lawsuits and is aware of pending claims arising in the ordinary course of its municipal and enterprise activities, certain of which seek substantial damages. These matters affecting the Airport System Fund are primarily contract and real property disputes. The status of such litigation ranges from early discovery to various levels of appeal, against which the City will continue to vigorously defend itself. Additionally, there are also various personal injury claims filed against the Airport System Fund which will also be vigorously defended. The amount of damages is limited in certain cases under the Texas Torts Claim Act and is subject to appeal. Management has determined the amounts of loss, if any, would not be material in these financial statements.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO THE FINANCIAL STATEMENTS

11. **Commitments and Contingencies, continued:****Environmental Liabilities**

The Houston Airport System recorded a \$10 million environmental liability in fiscal year 2017 for pollution remediation associated with a hangar addition project at George Bush Intercontinental. The scope of work encompasses vapor intrusion mitigation and soil & groundwater remediation. In fiscal year 2019, \$8.9 million of this environmental liability was realized. The remaining \$1.1 million liability recorded in fiscal year 2017 remains on the books at the end of fiscal year 2019.

Houston Airport System has received results for supplemental site testing from an independent study that will result in additional environmental remediation costs associated with the aforementioned hangar addition project. Additional cost of ~\$5 million has been estimated. No additional pollution remediation liability has been recorded in these financial statements in accordance with GASB 49 as the Houston Airport System is expected to recover the full ~\$5 million from United Airlines.

The Houston Airport System management is aware of additional sites polluted by asbestos, mold, and soil contamination. The assessment and remediation of asbestos, mold and groundwater contamination are ongoing and included in the costs of the capital project at the time it becomes an obligating event under GASB 49. Management has determined the costs of this additional remediation for which Houston Airport System is ultimately liable would not be material in these financial statements.

**Commitments for Capital Facilities**

At June 30, 2019 and 2018, the Fund had contracted for, but not spent, \$451,978,730 and \$325,858,459 respectively, for capital projects.

**Risk Management**

The City purchases fidelity coverage to comply with City ordinance, boiler and machinery insurance with a per occurrence loss limit of \$100 million and commercial property insurance with a per occurrence loss limit of \$175 million. The commercial property insurance sublimit for flood is \$175 million. Property insurance provides deductibles as follows: \$500,000 per occurrence for all perils except; 3% of the damaged insured value for windstorm or hail from a named storm, subject to a \$2.5 million minimum and a \$15 million maximum deductible; and 3% of the damaged insured value for flood, subject to a \$2.5 million minimum and a \$15 million maximum deductible. Should a named storm event occur that involves both perils of windstorm and flood, the maximum deductible is \$15 million.

The City has a separate terrorism policy which covers insured property value. The policy insures up to \$250 million aggregate loss limit (including \$25 million sub-limit for nuclear, chemical, biological and biochemical coverage) with a \$500,000 deductible on all claims except a 48-hour waiting period deductible on business interruption.

Self-insured claims are reported as liabilities in the accompanying financial statements when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. This determination is based on reported pending claims, estimates of claims incurred but not yet reported, actuarial reports and historical analysis.

Claims that are expected to be paid with expendable, available financial resources are accounted for in the General Fund and the appropriate Enterprise Funds.

For unemployment claims, the City pays claims as they are settled. Unemployment claim activity is as follows:

	<b>Unemployment Claim Activity</b>	
	<b>June 30, 2019</b>	<b>June 30, 2018</b>
Unpaid claims, beginning of fiscal year	\$ 159,929	\$ 153,019
Incurred claims (including IBNRs)	898,403	654,107
Claim payments	(626,948)	(647,197)
Unpaid claims, end of fiscal year	<u>\$ 431,384</u>	<u>\$ 159,929</u>

## NOTES TO THE FINANCIAL STATEMENTS

### 11. Commitments and Contingencies, continued:

#### Electricity Futures Contracts

At June 30, 2019, the City had entered into agreements to lock rates for part of the natural gas component of its expected electricity use from July 1, 2018 through June 30, 2019. The total committed price is approximately \$93 million for expected usage. The City may pay a different amount if actual electricity usage varies. This amount will be appropriated in future annual budgets.

### 12. Subsequent Events

#### Debt

The Houston Airport System (HAS) executed two low-cost 2.0% reimbursement loan agreements with the Texas State Energy Conservation Office (SECO) in May 2019 to finance environmentally friendly projects that will conserve energy consumption at the IAH and HOU airports. HAS submitted on November 1st, 2019 its first two reimbursement requests totaling \$324 thousand to SECO, and on November 14th requested another \$300 thousand in reimbursements for both commercial airports. As of the cutoff for CAFR publishing, none of the costs have been approved (or disapproved) and reimbursed by SECO. The repayment of the two loans will commence individually shortly after completion of the maximum-length 18-month projects, and after the last reimbursement requests are processed by SECO. Repayment will occur over approximately ten years. The two loans are capped at \$7,991,463.00 and \$7,531,679.00.

On September 11, 2019, the City extended its authorization of \$450 million in Inferior Lien Airport System Revenue Bonds through October 3, 2020, while confirming the forward delivery bond purchase agreement with the Royal Bank of Canada.

#### Terminal Construction at IAH

HAS anticipates extending a payment to United Airlines in December 2019 for \$36.5 million related to the early termination of United's leasehold for the original north concourse at Terminal C, now referred to as "Old C North," so that Old C North can be demolished and the site used for a new international pier that will connect to the existing Mickey Leland International Terminal, also referred to as Terminal D. This deferred outflow will be recovered, plus interest, over an 8-year period from the airlines using this terminal.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## REQUIRED PENSION SYSTEM SUPPLEMENTARY INFORMATION

## Houston Municipal Pension System Supplementary Information (Unaudited)

**Schedule of Changes in the Municipal Net Pension Liability and Related Ratios  
for the Fiscal Years ended June 30  
(in thousands)**

	Municipal				
	2019	2018	2017	2016	2015
<b>Total Pension Liability</b>					
Service Cost	\$ 77,175	\$ 78,149	\$ 75,961	\$ 68,968	\$ 65,810 (1)
Interest	349,592	341,276	331,166	379,781	361,007
Changes of benefit terms	-	-	(724,683)	-	-
Differences between expected and actual experience	(11,538)	19,158	(38,387)	(16,194)	(23,380)
Changes of assumptions	-	-	562,237	91,248	-
Benefit payments including refunds of employee contributions	(291,060)	(283,928)	(280,456)	(253,178)	(234,955)
Refunds	(1,394)	(807)	(718)	(1,105)	(1,549)
Net change in total pension liability	122,775	153,848	(74,880)	269,520	166,933
Total pension liability - beginning	5,113,358	4,959,510	5,034,390	4,764,870	4,597,937
Total pension liability - ending (a)	5,236,133	5,113,358	4,959,510	5,034,390	4,764,870
<b>Plan fiduciary net position</b>					
Contributions-employer	176,261	421,562	182,558	159,958	145,007
Contributions-employee	32,536	27,905	15,902	15,874	16,198
Net investment income	200,445	231,815	290,911	27,639	73,370
Benefit payments, including refunds of employee contributions	(291,060)	(283,928)	(280,456)	(253,178)	(234,955)
Administrative expense	(1,394)	(807)	(718)	(1,105)	(1,549)
Refunds	(5,363)	(6,442)	(6,827)	(7,360)	(7,007)
Other	710	(3,905)	1,272	1,651	1,041
Net change in plan fiduciary net position	112,135	386,200	202,642	(56,521)	(7,895)
Plan fiduciary net position-beginning	2,988,865	2,602,665	2,400,023	2,456,544	2,464,439
Plan fiduciary net position-ending (b)	3,101,000	2,988,865	2,602,665	2,400,023	2,456,544
<b>City's net pension liability-ending (a)-(b)</b>	<b>\$ 2,135,133</b>	<b>\$ 2,124,493</b>	<b>\$ 2,356,845</b>	<b>\$ 2,634,367</b>	<b>\$ 2,308,326</b>
Plan fiduciary net position as percentage of the total pension Liability	59.22%	58.45%	52.48%	47.67%	51.56%
Covered payroll	\$ 614,451	\$ 611,493	\$ 607,975	\$ 593,285	\$ 580,395
Net position liability as a percentage of covered payroll	347.49%	347.43%	387.65%	444.03%	397.72%

Schedule is intended to show information for 10 years. 2015 is the first year for this presentation. Additional years will be included as they become available.

- The 2015 amounts are based on 8.0% per City actuary.

	2019	2018	2017	2016	2015
Total Pension Liability	\$ 563,449	\$ 555,982	\$ 535,376	\$ 540,464	\$ 512,642
Fiduciary Net Position	(333,692)	(324,983)	(280,956)	(257,653)	(264,294)
Net Pension Liability	\$ 229,757	\$ 230,999	\$ 254,420	\$ 282,811	\$ 248,348
Proportionate Percentage	10.76%	10.87%	10.79%	10.74%	10.76%

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## REQUIRED PENSION SYSTEM SUPPLEMENTARY INFORMATION

**Schedule of City Contributions for Municipal Pension Plans for the Fiscal Years ended June 30**  
(in thousands)

	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 178,256	\$ 423,989	\$ 184,733	\$ 162,230	\$ 155,299	\$ 144,953
Contributions in relation to the actuarially determined contribution	176,261	421,562	182,558	159,959	145,007	128,274
Contribution deficiency (excess)	\$ 1,995	\$ 2,427	\$ 2,175	\$ 2,271	\$ 10,292	\$ 16,679
Covered payroll	614,451	611,493	607,975	593,285	580,395	557,226
Contributions as a percentage of covered payroll	28.7%	68.9%	30.0%	27.0%	25.0%	23.0%

**Schedule of the Fund's Contributions for Municipal Pension Plans for the Fiscal Years ended June 30**  
(in thousands)

	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	\$ 17,719	\$ 42,738	\$ 18,898	\$ 17,148	\$ 16,306	\$ 15,626
Contributions in relation to the actuarially determined contribution	17,520	42,493	18,676	17,171	15,547	14,029
Contribution deficiency (excess)	\$ 198	\$ 245	\$ 223	\$ (23)	\$ 759	\$ 1,597
Covered payroll	61,076	61,638	62,196	62,710	60,941	60,069
Contributions as a percentage of covered payroll	28.7%	68.9%	30.0%	27.4%	25.5%	23.4%

Schedule is intended to show information for 10 years. 2014 is the first year for this presentation. Additional years will be included as they become available.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## REQUIRED OTHER POST-EMPLOYMENT COST SUPPLEMENTARY INFORMATION

Schedule of OPEB Contributions  
(in thousands)

	Health Benefits		Long-term Disability	
	2019	2018	2019	2018
Actuarially determined contribution	\$ 133,961	\$ 194,236	\$ 6,720	\$ 5,990
Contributions in relation to the actuarially determined contribution	(57,100)	(39,820)	(947)	(975)
Contribution deficiency (excess)	\$ 76,861	\$ 154,416	\$ 5,773	\$ 5,015
Covered payroll	1,285,000	1,234,545	614,451	611,493
Contribution as a percentage of covered payroll	10.42%	15.73%	1.09%	0.98%

Schedule of Changes in the Net OPEB Liability and Related Ratios  
(in thousands)

	Health Benefits		Long-term Disability	
	2019	2018	2019	2018
<b>Total OPEB Liability</b>				
Service Cost	\$ 110,793	\$ 139,332	\$ 776	\$ 730
Interest	90,245	73,306	409	379
Changes of benefit terms	(5,007)	-	-	-
Differences between expected and actual experience	(99,153)	(15,727)	1,369	(14)
Changes of assumptions	(224,161)	(310,431)	255	(158)
Benefit payments including refunds of employee contributions	(57,100)	(39,820)	(947)	(975)
Net change OPEB liability	(184,383)	(153,340)	1,862	(38)
Net OPEB liability - beginning	2,438,572	2,591,912	11,040	11,078
Net OPEB liability - ending (a)	\$ 2,254,189	\$ 2,438,572	\$ 12,902	\$ 11,040
<b>Plan fiduciary net position</b>				
Service Cost	57,100	39,820	-	-
Employer contributions	-	-	(975)	(975)
Benefit payments including refunds of employee contributions	(57,100)	(39,820)	975	975
Net change in plan fiduciary net position	-	-	-	-
Net OPEB liability - beginning	-	-	-	-
Net OPEB liability - ending (b)	-	-	-	-
<b>City's net OPEB liability-ending (a)-(b)</b>	\$ 2,254,189	\$ 2,438,572	\$ 12,902	\$ 11,040
Plan fiduciary net position as percentage of the total OPEB liability	0.00%	0.00%	0.00%	0.00%
Covered payroll	\$ 1,285,000	\$ 1,235,000	\$ 614,451	\$ 611,493
Net OPEB liability as a percentage of covered payroll	175.42%	197.46%	2.10%	1.81%

## The Fund's proportionate share of OPEB is as follows (in thousands):

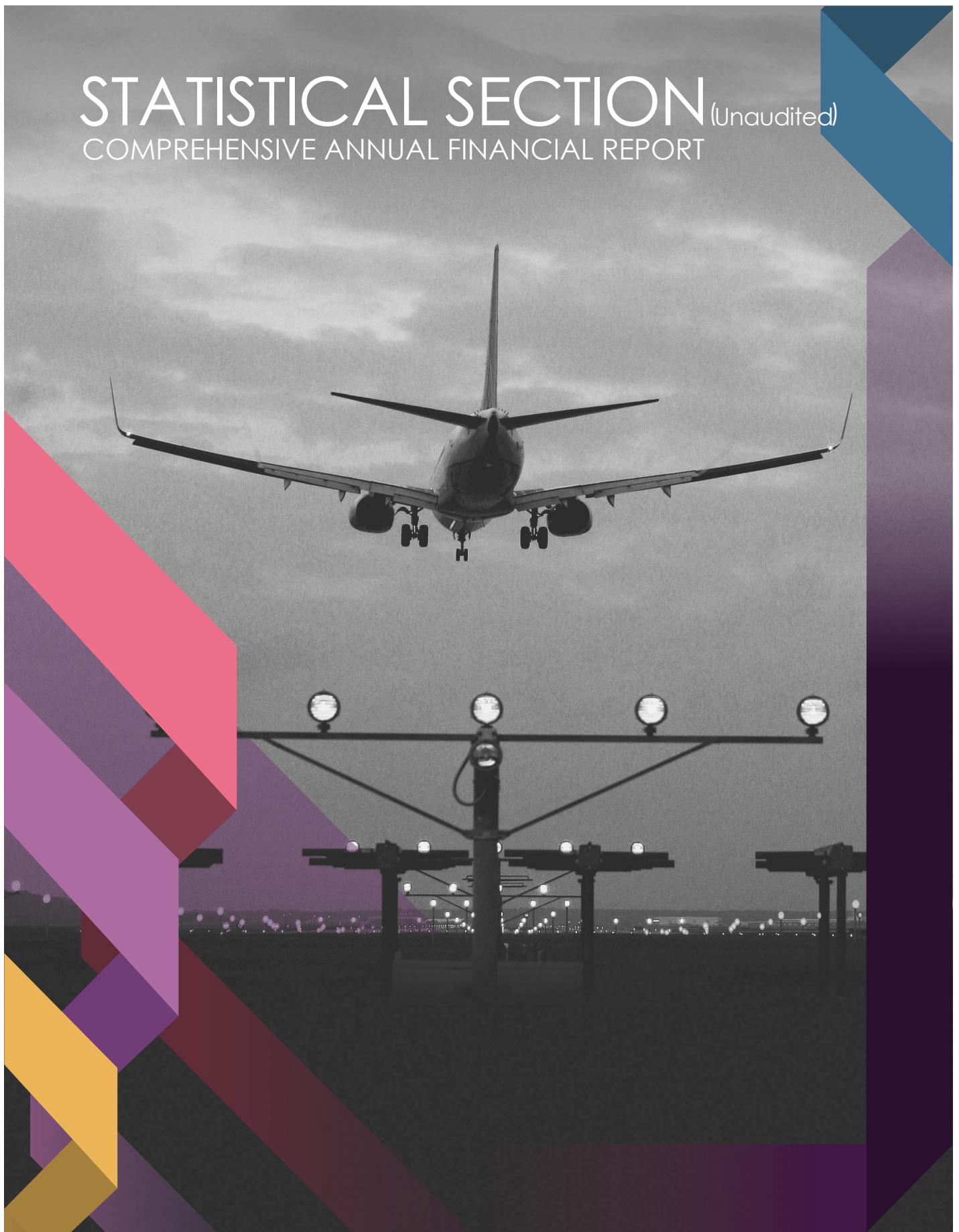
	Health Benefits		Long Term Disability	
	2019	2018	2019	2018
Total OPEB Liability	\$ 73,286	\$ 89,450	\$ 586	\$ 457
Fiduciary Net Position	-	-	-	-
Net OPEB Liability	\$ 73,286	\$ 89,450	\$ 586	\$ 457
Proportionate Percentage	8.89%	8.79%	6.94%	4.14%

Schedule is intended to show information for 10 years. 2018 is the first year for this presentation. Additional years will be included as they become available.



# STATISTICAL SECTION (Unaudited)

## COMPREHENSIVE ANNUAL FINANCIAL REPORT



**Statistical Section**

This section contains statistical information and differs from the financial statements because it usually covers more than one fiscal year and may present non-accounting data.

This information is presented in five categories:

**Financial Trend** – intended to assist users in understanding and assessing how the Houston Airport System's financial position has changed over time.

**Revenue Capacity** – intended to assist users in understanding and assessing the factors affecting the Houston Airport System's ability to generate its own sources of revenues.

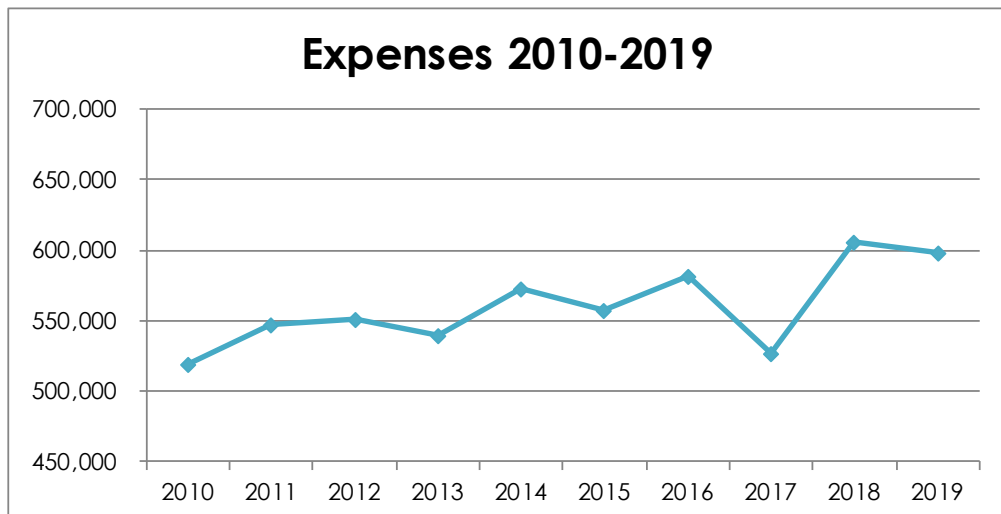
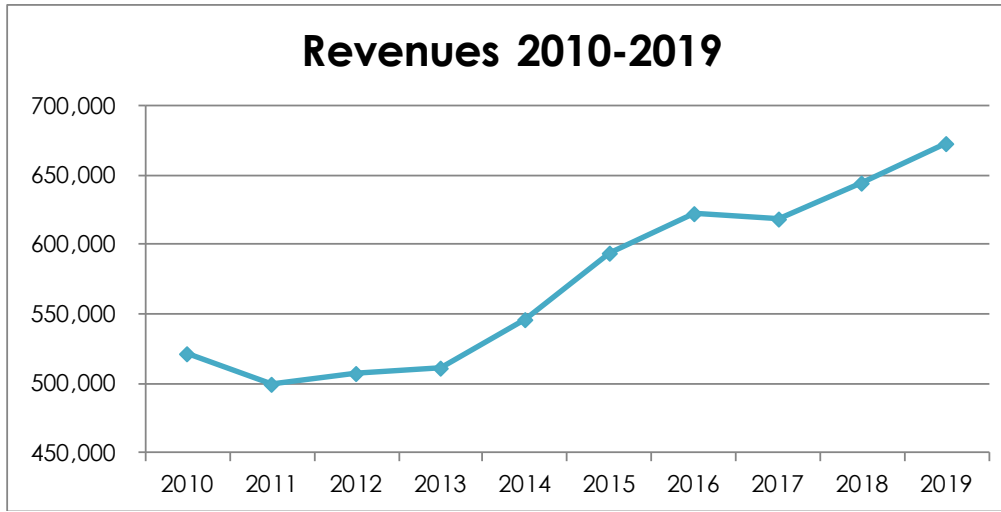
**Debt Capacity** – intended to assist users in understanding and assessing the Houston Airport System's debt burden and its ability to cover and issue additional debt.

**Operational Information** – intended to provide contextual information about the Houston Airport System's operations and resources to assist readers in using financial statement information to understand and assess the Houston Airport System economic condition.

**Demographic and Economic** – intended to assist users in understanding the socioeconomic environment within which the Houston Airport System operates and to provide information that facilitates comparisons of financial statement information over time and among similar entities.



TOTAL ANNUAL REVENUES AND EXPENSES (in thousands)  
 STATISTICAL SECTION



Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## STATISTICAL SECTION

## AIRPORT SYSTEM FUND

## CITY OF HOUSTON, TEXAS

TOTAL ANNUAL REVENUES AND EXPENSES (in thousands)  
STATISTICAL SECTION

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>CHANGE IN NET POSITION</b>										
OPERATING REVENUES										
Landing area fees	\$ 94,165	\$ 90,384	\$ 86,935	\$ 91,059	\$ 88,342	\$ 93,575	\$ 86,870	\$ 88,046	\$ 95,779	\$ 87,767
Building and ground area fees	182,105	181,182	182,320	181,701	186,505	197,039	216,018	221,181	220,214	211,323
Concession, parking, and other revenues	130,309	138,836	148,295	160,234	177,260	185,668	186,009	184,814	194,871	199,374
TOTAL OPERATING REVENUES	406,579	410,402	417,550	432,994	452,107	476,282	488,897	494,041	510,864	498,464
NONOPERATING REVENUES										
Investment income (loss)	30,488	9,735	5,636	(1,934)	11,170	7,496	13,260	3,403	8,591	45,067
Passenger Facility Charges	66,383	63,138	63,550	61,195	62,602	85,392	104,230	101,539	109,021	111,155
Customer Facility Charges	10,981	13,478	15,904	17,104	17,152	17,535	16,417	14,200	17,374	17,439
Other nonoperating revenues	7,525	3,409	4,644	1,978	3,225	7,969	124	5,596	(1,420)	340
TOTAL NONOPERATING REVENUES	115,377	89,760	89,734	78,343	94,149	118,392	134,031	124,738	133,566	174,001
<b>TOTAL REVENUES</b>	\$ 521,956	\$ 500,162	\$ 507,284	\$ 511,337	\$ 546,256	\$ 594,674	\$ 622,928	\$ 618,779	\$ 644,430	\$ 672,465

OPERATING EXPENSES										
Maintenance and operating										
Personnel costs	109,681	111,861	107,532	104,162	108,520	114,947	123,872	56,721	133,253	119,841
Supplies	5,817	6,534	7,290	7,344	8,823	7,933	8,140	7,794	5,219	8,390
Services	128,761	143,327	139,612	140,019	149,957	159,577	177,677	184,032	184,826	196,608
Non-capital outlay	792	22,585	9,626	14,052	10,202	4,072	5,730	5,912	8,806	12,638
Impairment to capital assets	-	-	-	6,514	7,710	-	-	-	-	-
Total M & O Expenses	245,051	284,307	264,060	272,091	285,212	286,529	315,419	254,459	335,104	337,477
Depreciation expense	166,788	165,657	193,266	173,448	174,825	177,512	179,398	184,203	176,053	174,266
TOTAL OPERATING EXPENSES	411,839	449,964	457,326	445,539	460,037	464,041	494,817	438,662	511,157	511,743
NONOPERATING EXPENSES										
Interest expense and others	107,444	97,515	94,012	93,749	112,350	92,803	86,259	87,574	94,061	84,578
TOTAL NONOPERATING EXPENSES	107,444	97,515	94,012	93,749	112,350	92,803	86,259	87,574	94,061	84,578
<b>TOTAL EXPENSES</b>	519,283	547,479	551,338	539,288	572,387	556,844	581,076	526,236	605,218	596,321
<b>CONTRIBUTIONS</b>	51,457	44,135	15,029	12,761	44,614	36,432	22,542	35,513	13,784	16,599
<b>TOTAL CHANGE IN NET POSITION</b>	\$ 54,130	\$ (3,182)	\$ (29,025)	\$ (15,190)	\$ 18,483	\$ 74,262	\$ 64,394	\$ 128,056	\$ 52,996	\$ 92,743

(continued)

**CITY OF HOUSTON, TEXAS**

**AIRPORT SYSTEM FUND**

**CHANGES IN NET POSITION AND PASSENGER FACILITY CHARGE COLLECTIONS (in thousands)**  
**STATISTICAL SECTION**

**NET POSITION AT YEAR END**

Net investment in capital assets  
 Restricted net position  
     Restricted for debt service  
     Restricted for maintenance and operations  
     Restricted for special facility  
     Restricted for renewal and replacement  
     Restricted for capital improvement  
     Unrestricted (deficit)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	661,854	624,507	580,636	518,464	469,971	466,196	537,172	542,363	531,232	542,125
	160,873	168,841	189,966	213,064	242,558	303,371	333,635	287,858	357,588	428,856
	42,405	43,320	44,023	46,309	49,736	53,912	54,942	54,805	56,891	60,525
	12,444	15,081	20,025	26,026	30,986	25,732	26,944	29,369	36,049	43,442
	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
	526,446	549,091	537,165	552,762	581,857	600,159	561,071	676,360	657,050	651,664
	-	-	-	-	-	(178,003)	(178,003)	(126,938)	(143,297)	(138,356)
<b>TOTAL NET POSITION</b>	<b>\$ 1,414,022</b>	<b>\$ 1,410,840</b>	<b>\$ 1,381,815</b>	<b>\$ 1,366,625</b>	<b>\$ 1,385,108</b>	<b>\$ 1,281,367</b>	<b>\$ 1,345,761</b>	<b>\$ 1,473,817</b>	<b>\$ 1,505,513</b>	<b>\$ 1,598,256</b>

**TOTAL NET POSITION**

**Passenger Facility Charge Collections (in thousands)**

Intercontinental  
 Hobby  
 Total

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	\$ 54,284	\$ 50,982	\$ 50,358	\$ 47,464	\$ 48,181	\$ 66,491	\$ 80,574	\$ 77,351	\$ 83,220	\$ 85,167
	12,099	12,156	13,192	13,731	14,421	18,901	23,656	24,188	25,801	25,988
	\$ 66,383	\$ 63,138	\$ 63,550	\$ 61,195	\$ 62,602	\$ 85,392	\$ 104,230	\$ 101,539	\$ 109,021	\$ 111,155

Year-over-Year Change

	104.90%	-4.89%	0.65%	-3.71%	2.30%	36.40%	22.06%	-2.58%	7.37%	9.47%
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## STATISTICAL SECTION

## AIRPORT SYSTEM FUND

## CITY OF HOUSTON, TEXAS

PLEGGED REVENUES (in thousands)  
STATISTICAL SECTION

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Operating revenues:</b>										
Landing area fees:										
Landing fees	\$ 91,032	\$ 87,163	\$ 83,059	\$ 86,911	\$ 84,098	\$ 89,426	\$ 82,703	\$ 84,036	\$ 91,258	\$ 83,318
Aviation fuel	1,329	1,378	1,382	1,444	1,529	1,521	1,527	1,350	1,679	1,554
Aircraft parking	1,804	1,843	2,494	2,704	2,715	2,628	2,640	2,660	2,842	2,895
Subtotal	94,165	90,384	86,935	91,059	88,342	93,575	86,870	88,046	95,779	87,767
Building and ground area revenues:										
Terminal space rentals	161,960	160,563	160,247	158,237	163,297	173,392	191,321	196,162	195,198	185,943
Cargo building rentals	2,490	2,511	2,473	2,397	2,432	2,506	2,484	2,448	2,390	2,391
Other rentals	5,158	5,067	5,394	5,848	6,174	6,252	6,808	6,453	6,460	6,454
Hangar rental	4,920	5,446	6,165	6,675	6,605	6,355	6,577	6,813	6,691	6,530
Ground rental	7,577	7,595	8,041	8,544	7,997	8,534	8,828	9,305	9,475	10,005
Subtotal	182,105	181,182	182,320	181,701	186,505	197,039	216,018	221,181	220,214	211,323
Parking, concession, and other revenues:										
Retail concessions	27,996	34,426	38,429	41,604	41,444	41,855	35,215	39,999	41,245	41,521
Auto parking	70,127	70,681	72,833	77,596	90,173	97,515	101,650	99,752	103,961	110,136
Auto rental concession	22,889	23,932	26,771	29,522	32,783	31,991	30,737	28,735	28,767	28,949
Ground transportation	4,987	5,946	6,186	6,639	8,301	9,323	10,083	10,402	11,062	12,645
Other operating revenues	4,310	3,851	4,076	4,873	4,559	4,984	8,324	5,926	9,836	6,123
Subtotal	130,309	138,836	148,295	160,234	177,260	185,668	186,009	184,814	194,871	199,374
<b>Total operating revenues</b>	<b>\$ 406,579</b>	<b>\$ 410,402</b>	<b>\$ 417,550</b>	<b>\$ 432,994</b>	<b>\$ 452,107</b>	<b>\$ 476,282</b>	<b>\$ 488,897</b>	<b>\$ 494,041</b>	<b>\$ 510,864</b>	<b>\$ 498,464</b>

Gross revenues include all operating revenue of the Airport Fund, and all nonoperating revenue except for revenue with legal spending restrictions. Maintenance and operating expenses include all operating expenses of the system except for depreciation and capital expenses. Net revenues in each fiscal year are required to be at least equal to the larger of either: (1) the debt service and reserve transfer requirements of each fiscal year or; (2) 125%, 110% and 100% of the debt service requirements for such fiscal year of the Senior Lien Bonds (or Commercial Paper assumed to be refinanced as Senior Lien Revenue Bonds), Subordinate Lien Revenue Bonds and Inferior Lien debt, respectively.

(continued)

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

PLEGGED REVENUES (in thousands)  
STATISTICAL SECTION

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Net revenues</b>										
Operating revenue	\$ 406,579	\$ 410,402	\$ 417,550	\$ 432,994	\$ 452,107	\$ 476,282	\$ 488,897	\$ 494,041	\$ 510,864	\$ 498,464
Interest on investments - revenue fund	15,988	12,889	9,826	7,029	5,499	6,014	6,986	9,306	13,348	19,681
Other nonoperating revenues	2,504	341	2,289	1,222	3,162	7,526	(52)	7,177	(1,805)	46
Gross revenues	425,071	423,632	429,665	441,245	460,768	489,822	495,831	510,524	522,407	518,191
Less: Maintenance and operating expenses	(245,147)	(262,668)	(255,507)	(252,745)	(268,745)	(283,557)	(314,715)	(254,506)	(326,889)	(326,863)
Net pledged revenue	\$ 179,924	\$ 160,964	\$ 174,158	\$ 188,500	\$ 192,023	\$ 206,265	\$ 181,116	\$ 256,018	\$ 195,518	\$ 191,328
<b>Debt Service</b>										
Principal	\$ 51,832	\$ 61,136	\$ 59,575	\$ 56,800	\$ 60,419	\$ 71,999	\$ 79,093	\$ 82,707	\$ 81,137	\$ 80,110
Interest	93,298	97,546	91,736	97,138	96,005	91,320	84,811	92,316	93,319	96,202
Less PFC revenue available for debt service	145,130	158,682	151,311	153,938	156,424	163,319	163,904	175,023	174,456	176,312
Less grant revenue available for debt service	(27,087)	(38,828)	(36,619)	(34,390)	(35,614)	(38,054)	(42,320)	(54,673)	(50,642)	(60,646)
Total debt service	(29,084)	(17,999)	(7,360)	-	(22,942)	(16,399)	(13,888)	-	-	-
<b>Coverage of debt service</b>	\$ 88,959	\$ 101,855	\$ 107,332	\$ 119,548	\$ 97,868	\$ 108,866	\$ 107,696	\$ 120,350	\$ 123,814	\$ 115,666
Net Required revenue per bond rate covenant	2.02	1.58	1.62	1.58	1.96	1.89	1.68	2.13	1.58	1.65
<b>Ratio of required revenue</b>	\$ 98,571	\$ 112,873	\$ 119,343	\$ 133,552	\$ 108,369	\$ 122,822	\$ 120,125	\$ 134,348	\$ 137,474	\$ 127,430
	1.83	1.43	1.46	1.41	1.77	1.68	1.51	1.91	1.42	1.50

Debt service requirements is equal to interest expense (excluding amortization of bond discount and amounts provided for payment of interest by bond proceeds and other sources and deposited into a restricted fund for that purpose) for each respective fiscal year ended June 30, plus principal payment payable on the next July 1. Certain grant revenue and passenger facility charge revenue is available to cover net required revenue and required debt service. In FY2016, \$6,250,000 in remaining series 2009A proceeds were used to pay senior lien bond debt service.

Net revenues in each fiscal year are required to be at least equal to the larger of either: (1) the debt service and reserve transfer requirements of each fiscal year or; (2) 125%, 110% and 100% of the debt service requirements for such fiscal year of the Senior Lien Bonds (or Commercial Paper assumed to be refinanced as Senior Lien Revenue Bonds), Subordinate Lien Revenue Bonds and Inferior Lien debt, respectively.

Revenues and expenses cannot be included in net pledged revenue if they are accounted for outside of the Airport Revenue Fund, and do not affect amounts available for transfer to debt service funds.

\* Operating and maintenance expense for debt coverage calculations decreased by \$60.2 million between FY17 and FY16, primarily due to a \$67.4 million decrease in pension expense associated with pension reform enacted in 2017. Without the effects of pension reform, it is estimated that debt service coverage would have been 1.63.



STATISTICAL SECTION

AIRPORT SYSTEM FUND

CITY OF HOUSTON, TEXAS

PLEGGED REVENUES FOR CONSOLIDATED RENTAL CAR FACILITY  
STATISTICAL SECTION

	For Years Ended December 31:										
(not rounded to the nearest thousand)	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Customer facility charge collections	\$ 9,523,308	\$ 12,300,253	\$ 14,596,573	\$ 16,444,942	\$ 17,317,058	\$ 17,451,368	\$ 17,359,920	\$ 14,822,377	\$ 15,669,757	\$ 17,311,972	
Interest income	8,417	7,961	475	318	731	785	3,840	29,003	56,976	131,162	
Transfers from Rate Stabilization Account	1,142,458	-	-	-	-	-	-	-	-	-	
Transfers from Coverage Account	3,169,143	3,169,143	3,169,143	3,169,143	3,169,143	3,169,143	3,169,143	3,169,143	3,169,143	3,169,143	
Total resources available for debt service	\$ 13,843,326	\$ 15,477,357	\$ 17,766,191	\$ 19,614,403	\$ 20,486,932	\$ 20,621,296	\$ 20,532,903	\$ 18,020,523	\$ 18,895,876	\$ 20,612,277	
Total annual debt service:											
Special Facility Revenue Bonds, Series 2001:											
Principal	\$ 2,415,000	\$ 2,675,000	\$ 2,960,000	\$ 3,260,000	\$ 3,590,000	\$ -	\$ -	\$ -	\$ -	\$ -	
Interest	8,255,351	8,108,278	7,944,033	7,759,329	7,552,645	6,006,288	4,691,128	4,691,128	4,691,128	4,691,128	
Subtotal Series 2001	10,670,351	10,783,278	10,904,033	11,019,329	11,142,645	6,006,288	4,691,128	4,691,128	4,691,128	4,691,128	
Special Facility Refunding Bonds, Series 2014:											
Principal	-	-	-	-	-	4,355,000	5,160,000	5,305,000	5,490,000	5,715,000	
Interest	-	-	-	-	-	230,243	691,019	652,835	584,082	478,893	
Subtotal Series 2014	-	-	-	-	-	4,585,243	5,851,019	5,957,835	6,074,082	6,193,893	
Total annual debt service	\$ 10,670,351	\$ 10,783,278	\$ 10,904,033	\$ 11,019,329	\$ 11,142,645	\$ 10,591,531	\$ 10,542,147	\$ 10,648,963	\$ 10,765,210	\$ 10,885,021	
<b>Debt service coverage ratio</b>	1.30	1.44	1.63	1.78	1.84	1.95	1.95	1.69	1.76	1.89	

- Customer Facility Charges are used first to pay debt service on the Airport System Special Facilities Taxable Revenue Bonds (Consolidated Rental Car Facility Project), Series 2001 and on the Airport System Special Facilities Taxable Revenue Refunding Bonds (Consolidated Rental Car Facility Project), Series 2014. Additional collections are used to pay administrative costs for the special facility agreement, and then for capital improvements and major repairs on the special facility. Customer facility charges are kept and invested separately by BNY Mellon Bank as trustee, and cannot be used for any other City or Airport Fund purpose as long as any Special Facility Revenue Bonds (CRCF) remain outstanding.
- No other City or Airport Fund revenues are pledged toward the payment of Special Facility Revenue Bonds (CRCF).
- The Special Facilities Revenue Bond (CRCF) covenants require the Airport Fund to maintain a debt service coverage ratio of at least 125%.
- The City imposed a \$3.00 Customer Facility Charge as of April 1, 2001, which was increased to \$3.50 effective July 1, 2003, reduced to \$3.25 effective April 1, 2005, reduced to \$3.00 effective July 1, 2006, increased to \$3.75 effective November 1, 2009, increased to \$4.25 effective April 1, 2011, reduced to \$4.00 effective April 1, 2013, and reduced again to \$3.00 effective April 1, 2016, and increased to \$4.00 effective April 1, 2017.
- For purposes of coverage calculation, collections are considered available for debt service when they are received by the trustee.
- For purposes of coverage calculation, interest and principal is calculated on the accrual basis, for instance, in 2008, funding is accumulated for payments due on 7/1/2008 and 1/1/2009.
- For more information on the Consolidated Rental Car Facility assets and debt, see Notes 1 and 5.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

OUTSTANDING DEBT (in thousands)  
STATISTICAL SECTION

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Outstanding debt by type (1):</b>										
Senior lien revenue bonds, fixed rate	\$ 449,660	\$ 449,660	\$ 449,660	\$ 449,660	\$ 449,660	\$ 449,660	\$ 440,385	\$ 430,645	\$ 420,420	\$ -
Subordinate lien revenue bonds, fixed rate	1,622,090	1,582,080	1,464,905	1,419,125	1,376,505	1,331,765	1,284,860	1,232,585	1,331,795	1,843,145
Subordinate lien revenue bonds, periodic auction rate	322,775	315,550	305,425	298,525	286,300	276,275	266,925	254,475	242,275	-
Subordinate lien revenue bonds, variable rate	92,900	93,730	93,630	93,505	93,305	93,105	92,905	92,705	92,505	92,305
Subtotal, revenue bonds payable	2,487,425	2,441,020	2,313,620	2,260,815	2,205,770	2,150,805	2,085,075	2,010,410	2,086,995	1,935,450
Unamortized discount	(18,071)	(16,216)	(4,176)	(3,905)	(3,619)	(3,317)	(3,016)	(2,717)	(2,422)	(675)
Unamortized premium	12,319	11,583	96,928	89,587	82,318	75,141	68,118	61,302	112,362	179,927
Revenue bonds payable, net	\$ 2,481,673	\$ 2,436,387	\$ 2,406,372	\$ 2,346,497	\$ 2,284,469	\$ 2,222,629	\$ 2,150,177	\$ 2,068,995	\$ 2,196,935	\$ 2,114,702
Senior lien commercial paper payable	6,000	-	-	-	1,200	49,500	87,000	87,000	21,473	48,473
Inferior lien contract payable	41,735	37,430	32,895	28,115	23,075	17,760	12,155	6,240	-	-
Pension obligation bonds payable (2)	2,006	2,006	2,006	2,006	2,006	2,006	2,006	2,006	29,616	2,006
Note payable (3)	-	-	-	-	-	-	120,439	115,421	-	-
Special facilities revenue bonds, rental car (4)	117,915	115,240	112,280	109,020	105,430	102,055	96,895	91,590	86,100	80,385
<b>Total outstanding debt payable</b>	\$ 2,649,329	\$ 2,591,063	\$ 2,553,553	\$ 2,485,638	\$ 2,416,180	\$ 2,393,950	\$ 2,468,672	\$ 2,371,252	\$ 2,334,124	\$ 2,245,566
<b>Total enplaned passengers</b>	24,531,054	24,944,816	25,303,825	25,132,792	25,944,623	26,903,969	27,813,447	27,364,057	27,712,788	29,807,599
<b>Outstanding debt per enplaned passenger</b>	\$ 108.00	\$ 103.87	\$ 100.92	\$ 98.90	\$ 93.13	\$ 88.98	\$ 88.76	\$ 86.66	\$ 84.23	\$ 75.34
<b>Outstanding conduit debt:</b>										
Special facilities revenue bonds (5)	\$ 459,395	\$ 455,895	\$ 565,500	\$ 565,090	\$ 561,470	\$ 711,790	\$ 711,790	\$ 711,790	\$ 848,865	\$ 848,865

(1) Includes both current and long-term liabilities

(2) A portion of the City of Houston Taxable General Obligation Pension Bonds, Series 2005 and Series 2017, have been allocated to the Airport Fund for payment. Series 2017 was paid on March 1, 2019.

(3) A Note payable to Southwest Airlines for the construction of the Hobby International Terminal project was paid with Revenue and Refunding Bond Series 2018A proceeds on March 20, 2018.

(4) The Special Facilities Revenue and Refunding Bonds (Consolidated Rental Car Facility), Series 2001 and Series 2014, are included in the Airport Fund financial statements (See Notes 1 and 5).

(5) These Special Facilities Revenue Bonds are conduit bonds secured solely by lease payments from United Airlines. No revenues of the Airport System Fund are pledged to pay these bonds.

STATISTICAL SECTION

AIRPORT SYSTEM FUND

CITY OF HOUSTON, TEXAS

SUMMARY OF CERTAIN FEES AND CHARGES  
STATISTICAL SECTION

IAH	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Landing Rates (1) (5)	2.93	2.74	2.74	2.85	2.84	2.80	2.64	2.57	2.76	2.70
Terminal Space Rentals (2) (5)	24.36-82.96	23.88-80.97	21.38-79.14	21.67-78.25	20.77-72.51	21.75-75.45	22.88-76.08	22.95-72.46	24.26-72.69	24.68-66.92
Apron Rentals (2) (5)	1.926-2.626	1.841-2.613	1.712-2.612	1.927-2.702	2.051-2.576	2.114-2.597	2.155-2.703	2.236-2.649	2.453-2.780	2.754-2.933
Aircraft Parking (per day) (4)	70.00-300.00	70.00-300.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00
Cargo (per day) (3)	125.00-450.00	125.00-450.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00
Parking Rates (6)										
Economy (Ecopark) Uncovered (7)	5.00	5.00	5.00	5.00	6.00	6.00	6.00	6.00	6.00	6.00
Economy (Ecopark) Covered (7)	7.00	7.00	7.00	7.00	8.00	8.00	8.00	8.00	8.00	8.00
Economy (Ecopark2) Covered (8)	-	-	-	-	-	-	5.00	6.00	6.00	7.00
Structured (9)	17.00	17.00	17.00	17.00	19.00	19.00	20.00	22.00	22.00	24.00
Sure Park (10)	20.00	20.00	20.00	20.00	23.00	23.00	24.00	24.00	24.00	26.00
Valet (10)	-	-	-	23.00	25.00	25.00	26.00	26.00	26.00	28.00

HOU	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Landing Rates (1) (5)	2.57	2.23	1.94	1.93	1.77	2.11	1.84	1.98	2.01	1.86
Terminal Space Rentals (2) (5)	88.95-110.29	96.91-99.41	90.77-93.27	85.95-88.45	87.73-90.23	92.77-95.27	87.62-90.12	64.79-67.29	48.10-68.15	51.78-70.17
Apron Rentals (2) (5)	2.36	1.97	1.79	1.82	1.89	2.21	1.77	1.652-1.853	1.791-1.848	1.687-1.738
Aircraft Parking (per day) (4)	70.00-300.00	70.00-300.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00	100.00-400.00
Cargo (per day) (3)	125.00-450.00	125.00-450.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00	200.00-600.00
Parking Rates (6)										
Economy (Ecopark) (11)	8.00	8.00	10.00	10.00	12.00	-	-	-	-	-
Economy (Ecopark2) (12)	6.00	6.00	6.00	6.00	10.00	10.00	10.00	10.00	10.00	10.00
Structured (9)	17.00	17.00	17.00	17.00	19.00	19.00	20.00	22.00	22.00	24.00
Valet (10)	-	-	-	23.00	25.00	25.00	26.00	26.00	26.00	28.00

- (1) Per 1,000 pounds of landing weight
- (2) Range per square foot
- (3) Daily cargo rates increased on August 1, 2011 at Intercontinental and Hobby to a range of \$200-\$600
- (4) Daily aircraft parking rates increased on August 1, 2011 at Intercontinental and Hobby to a range of \$100-\$400
- (5) 2010-2018 actual rates provided versus budgeted; 2019 budgeted rates provided.
- (6) Maximum per day
- (7) New rates effective September 1, 2013
- (8) New rates effective December 3, 2018
- (9) New rates effective February 4, 2019
- (10) New rates effective February 4, 2019
- (11) Ecopark 1 at Hobby closed March 18, 2014
- (12) New rates effective May 5, 2014

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

PASSENGER STATISTICS  
LAST TEN YEARS

Fiscal Year	Intercontinental		Hobby		Ellington Airport		Total	
	Enplanements & Deplanements (in thousands)	Percentage Change	Enplanements & Deplanements (in thousands)	Percentage Change	Enplanements & Deplanements (in thousands)	Percentage Change	Enplanements & Deplanements (in thousands)	Percentage Change
2010	32,093	0.3%	8,755	5.7%	-	-	40,848	1.4%
2011	31,638	-1.4%	9,434	7.8%	-	-	41,072	0.5%
2012	31,778	0.4%	10,192	8.0%	-	-	41,970	2.2%
2013	30,830	-3.0%	10,690	4.9%	-	-	41,520	-1.1%
2014	30,832	0.0%	11,609	8.6%	-	-	42,441	2.2%
2015	31,968	3.7%	11,837	2.0%	-	-	43,805	3.2%
2016	31,959	-0.0%	12,209	3.1%	-	-	44,168	0.8%
2017	30,809	-3.6%	12,423	1.8%	-	-	43,232	-2.1%
2018	31,102	1.0%	12,864	3.5%	-	-	43,966	1.7%
2019	33,972	9.2%	13,628	5.9%	-	-	47,600	8.3%

International Passengers							HAS Passengers Total	
Fiscal Year	Intercontinental		Hobby		Total		Enplanements & Deplanements (in thousands)	Percentage Change
	Enplanements & Deplanements (in thousands)	Percentage Change	Enplanements & Deplanements (in thousands)	Percentage Change	Enplanements & Deplanements (in thousands)	Percentage Change		
2010	8,138	6.5%	-	-	8,138	6.5%	48,986	2.2%
2011	8,730	7.3%	-	-	8,730	7.3%	49,802	1.7%
2012	8,686	-0.5%	-	-	8,686	-0.5%	50,656	1.7%
2013	8,795	1.3%	-	-	8,795	1.3%	50,315	-0.7%
2014	9,470	7.7%	-	-	9,470	7.7%	51,911	3.2%
2015	10,018	5.8%	4	-	10,022	5.8%	53,827	3.7%
2016	10,904	8.8%	519	12875.0%	11,423	14.0%	55,591	3.3%
2017	10,662	-2.2%	860	65.7%	11,522	0.9%	54,754	-1.5%
2018	10,404	-2.4%	957	11.3%	11,361	-1.4%	55,327	1.0%
2019	10,939	5.1%	966	0.9%	11,905	4.8%	59,505	7.6%

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

CITY OF HOUSTON, TEXAS

AIRPORT SYSTEM FUND

PASSENGER STATISTICS BY CARRIER FOR YEARS ENDED JUNE 30, 2019 AND 2018

Domestic	Intercontinental			Hobby			Houston Airport System		
	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	
Airlines	Total Passengers	Market Share	Total Passengers	Market Share	Total Passengers	Market Share	Total Passengers	Market Share	
Alaska Airlines	185,838	0.4%	-	0.0%	-	0.0%	185,838	0.3%	
<b>American Airlines, Inc.</b>	1,678,994	4.1%	124	0.0%	-	0.0%	1,679,118	3.1%	
Compass Airlines - AE	132,886	0.3%	-	0.0%	-	0.0%	132,886	0.2%	
Envoy Air - AA	101,030	0.2%	30,889	0.2%	20,245	0.1%	131,919	0.2%	
ExpressJet Airlines Inc. - AE	-	0.0%	12,552	0.1%	12,693	0.1%	12,552	0.0%	
Mesa Airlines - HP	-	0.0%	-	0.0%	-	0.0%	-	0.0%	
Mesa Airlines - AE	135,999	0.3%	-	0.0%	57,496	0.4%	135,999	0.2%	
PSA Airlines - US	-	0.0%	-	0.0%	-	0.0%	-	0.0%	
Republic Airlines - AE	179,472	0.5%	-	0.0%	10,736	0.1%	179,472	0.4%	
SkyWest Airlines - AE	59,665	0.1%	-	0.0%	33,628	0.2%	59,665	0.1%	
<b>American Airlines, Inc. Subtotal</b>	<b>2,288,046</b>	<b>5.5%</b>	<b>43,565</b>	<b>0.3%</b>	<b>134,798</b>	<b>0.9%</b>	<b>2,331,411</b>	<b>4.2%</b>	
<b>Delta</b>	<b>783,676</b>	<b>1.9%</b>	<b>407,279</b>	<b>2.9%</b>	<b>436,104</b>	<b>3.0%</b>	<b>1,190,955</b>	<b>2.2%</b>	
Atlantic Southeast - DL	-	0.0%	26,900	0.3%	-	0.0%	26,900	0.0%	
Compass Airlines - DL	6,345	0.0%	-	0.0%	-	0.0%	6,345	0.0%	
Endeavor - DL	178,510	0.4%	1,564	0.0%	-	0.0%	180,074	0.3%	
ExpressJet Airlines - DL	23,525	0.1%	-	0.0%	-	0.0%	23,525	0.0%	
GO JET Airlines - DL	69,655	0.2%	-	0.0%	-	0.0%	69,655	0.1%	
Republic Airlines - DL	175,732	0.4%	-	0.0%	-	0.0%	175,732	0.3%	
SkyWest Airlines - DL	290,692	0.7%	-	0.0%	-	0.0%	290,692	0.6%	
<b>Delta Subtotal</b>	<b>1,528,135</b>	<b>3.7%</b>	<b>435,743</b>	<b>3.2%</b>	<b>436,104</b>	<b>3.0%</b>	<b>1,963,878</b>	<b>3.5%</b>	
Boutique Air	-	0.0%	-	0.0%	-	0.0%	-	0.0%	
Frontier	285,337	0.7%	-	0.0%	-	0.0%	285,337	0.5%	
JetBlue Airways	-	0.0%	179,012	1.3%	176,990	1.2%	179,012	0.3%	
Kalitta Charters, LLC	16	0.0%	4	0.0%	5	0.0%	20	0.0%	
<b>Southwest Airlines Company</b>	-	0.0%	11,937,077	86.4%	12,709,594	87.1%	11,937,077	21.6%	
<b>Southwest Airlines Company Subtotal</b>	-	0.0%	<b>11,937,077</b>	<b>86.4%</b>	<b>12,709,594</b>	<b>87.1%</b>	<b>11,937,077</b>	<b>21.6%</b>	
Spirit Airlines	2,024,422	4.9%	-	0.0%	-	0.0%	2,024,422	3.7%	
<b>United Airlines</b>	16,619,285	40.0%	-	0.0%	-	0.0%	16,619,285	30.0%	
ExpressJet Airlines, Inc. - UA	3,002,395	7.3%	-	0.0%	-	0.0%	3,002,395	5.5%	
Mesa Airlines - UA	3,170,575	7.6%	-	0.0%	-	0.0%	3,170,575	5.7%	
Republic Airlines - UA	1,477,664	3.6%	-	0.0%	-	0.0%	1,477,664	2.7%	
SkyWest Airlines - UA	517,469	1.2%	-	0.0%	-	0.0%	517,469	0.9%	
<b>United Airlines Inc. Subtotal</b>	<b>24,787,408</b>	<b>59.7%</b>	<b>27,273,525</b>	<b>60.7%</b>	<b>27,273,525</b>	<b>44.8%</b>	<b>24,787,408</b>	<b>44.8%</b>	
<b>US Airways</b>	-	0.0%	-	0.0%	-	0.0%	-	0.0%	
Mesa Airlines - US	-	0.0%	260,734	1.9%	165,816	1.1%	260,734	0.5%	
<b>US Airways Subtotal</b>	-	0.0%	<b>260,734</b>	<b>1.9%</b>	<b>165,816</b>	<b>1.1%</b>	<b>260,734</b>	<b>0.5%</b>	
Charter Airlines	2,982	0.0%	8,248	0.1%	4,686	0.0%	11,230	0.0%	
<b>Total Domestic</b>	<b>31,102,184</b>	<b>74.9%</b>	<b>12,864,383</b>	<b>93.1%</b>	<b>13,627,993</b>	<b>93.4%</b>	<b>43,966,567</b>	<b>79.5%</b>	

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

CITY OF HOUSTON, TEXAS

AIRPORT SYSTEM FUND

PASSENGER STATISTICS BY CARRIER TOTAL FOR YEARS ENDED JUNE 30, 2019 AND 2018

International	Intra-continental			Hobby			International			Houston Airport System		
	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2018	Fiscal Year 2019
Airlines	Total Passengers	Market Share	Total Passengers	Market Share	Total Passengers	Market Share	Total Passengers	Market Share	Total Passengers	Market Share	Total Passengers	Market Share
AeroMexico	155,258	0.4%	142,906	0.3%	-	0.0%	-	0.0%	155,258	0.3%	142,906	0.2%
All Nippon Airways Company, Ltd. - ANA	141,402	0.3%	153,855	0.3%	-	0.0%	-	0.0%	141,402	0.3%	153,855	0.3%
American	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Mesa Airlines - AE	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%	-	0.0%
<b>American Airlines, Inc. Subtotal</b>	-	<b>0.0%</b>	-	<b>0.0%</b>	-	<b>0.0%</b>	-	<b>0.0%</b>	-	<b>0.0%</b>	-	<b>0.0%</b>
Air China	120,146	0.3%	156,832	0.3%	-	0.0%	-	0.0%	120,146	0.2%	156,832	0.3%
Air France	146,276	0.4%	156,864	0.3%	-	0.0%	-	0.0%	146,276	0.3%	156,864	0.3%
Air New Zealand	137,657	0.3%	144,018	0.3%	-	0.0%	-	0.0%	137,657	0.2%	144,018	0.2%
Atlas Air	8,318	0.0%	-	0.0%	-	0.0%	-	0.0%	8,318	0.0%	-	0.0%
BahamasAir	5,074	0.0%	9,805	0.0%	-	0.0%	-	0.0%	5,074	0.0%	9,805	0.0%
British Airways	226,636	0.5%	239,024	0.5%	-	0.0%	-	0.0%	226,636	0.4%	239,024	0.4%
Emirates	207,496	0.5%	261,321	0.6%	-	0.0%	-	0.0%	207,496	0.4%	261,321	0.4%
EVA Airways Corporation	183,622	0.4%	202,101	0.4%	-	0.0%	-	0.0%	183,622	0.3%	202,101	0.3%
Interjet	168,409	0.4%	193,987	0.4%	-	0.0%	-	0.0%	168,409	0.3%	193,987	0.3%
JetBlue Airways	-	0.0%	-	0.0%	-	0.0%	598	0.0%	-	0.0%	598	0.0%
Jazz Air - Air Canada	349,571	0.8%	329,540	0.7%	-	0.0%	-	0.0%	349,571	0.6%	329,540	0.6%
KLM	164,806	0.4%	174,729	0.4%	-	0.0%	-	0.0%	164,806	0.3%	174,729	0.3%
Kalitta Charters, LLC	2	0.0%	-	0.0%	-	0.0%	-	0.0%	2	0.0%	-	0.0%
Korean Air Lines Co., Ltd.	19,847	0.0%	-	0.0%	-	0.0%	-	0.0%	19,847	0.0%	-	0.0%
Lufthansa	279,421	0.7%	290,560	0.6%	-	0.0%	-	0.0%	279,421	0.5%	290,560	0.5%
Qatar Airways	154,917	0.4%	156,608	0.3%	-	0.0%	-	0.0%	154,917	0.3%	156,608	0.3%
Singapore Airlines	94,029	0.2%	92,005	0.2%	-	0.0%	-	0.0%	94,029	0.2%	92,005	0.2%
Spirit Airlines	120,318	0.3%	182,717	0.4%	-	0.0%	-	0.0%	120,318	0.3%	182,717	0.3%
Southwest Airlines Company	-	0.0%	-	0.0%	956,910	6.9%	964,942	6.6%	956,910	1.7%	964,942	1.6%
TACA	47,793	0.1%	63,021	0.1%	-	0.0%	-	0.0%	47,793	0.1%	63,021	0.1%
Turkish Airlines	189,048	0.5%	197,000	0.4%	-	0.0%	-	0.0%	189,048	0.3%	197,000	0.3%
<b>United Airlines Inc.</b>	6,211,165	15.0%	6,355,437	14.2%	-	0.0%	-	0.0%	6,211,165	11.3%	6,355,437	10.7%
ExpressJet Airlines, Inc. - UA	292,503	0.7%	261,267	0.5%	-	0.0%	-	0.0%	292,503	0.5%	261,267	0.4%
Mesa Airlines - UA	780,774	1.9%	903,072	2.0%	-	0.0%	-	0.0%	780,774	1.4%	903,072	1.5%
Republic Airlines Inc. - UA	10,860	0.0%	-	0.0%	-	0.0%	-	0.0%	10,860	0.0%	-	0.0%
SkyWest Airlines - UA	11,678	0.0%	-	0.0%	-	0.0%	-	0.0%	11,678	0.0%	-	0.0%
<b>United Airlines Inc. Subtotal</b>	<b>7,306,980</b>	<b>17.6%</b>	<b>7,519,776</b>	<b>16.7%</b>	-	<b>0.0%</b>	-	<b>0.0%</b>	<b>7,306,980</b>	<b>13.2%</b>	<b>7,519,776</b>	<b>12.6%</b>
WestJet Airlines	99,371	0.2%	124,447	0.3%	-	0.0%	-	0.0%	99,371	0.2%	124,447	0.2%
Viva Aerobus	38,072	0.1%	81,766	0.2%	-	0.0%	-	0.0%	38,072	0.1%	81,766	0.1%
Volaris Airline	38,214	0.1%	57,754	0.1%	-	0.0%	-	0.0%	38,214	0.1%	57,754	0.1%
Charter Airlines	1,170	0.0%	8,819	0.0%	-	0.0%	-	0.0%	1,170	0.0%	8,819	0.0%
<b>Total International</b>	<b>10,403,853</b>	<b>25.1%</b>	<b>10,939,285</b>	<b>24.4%</b>	<b>956,910</b>	<b>6.9%</b>	<b>965,540</b>	<b>6.6%</b>	<b>11,360,763</b>	<b>20.3%</b>	<b>11,904,825</b>	<b>20.0%</b>
<b>Total Airlines</b>	<b>41,506,037</b>	<b>100.0%</b>	<b>44,911,561</b>	<b>100.0%</b>	<b>13,821,293</b>	<b>100.0%</b>	<b>14,593,533</b>	<b>100.0%</b>	<b>55,327,330</b>	<b>100.0%</b>	<b>59,505,094</b>	<b>100.0%</b>

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

ORIGINATING PASSENGER ENPLANEMENTS  
STATISTICAL SECTION

## George Bush Intercontinental Airport

Fiscal Year	Originating Enplanements	Connecting Enplanements	Total Enplaned Passengers	Originating Enplanement Percentage
2010	9,278,705	10,854,946	20,133,651	46.1%
2011	9,683,773	10,506,727	20,190,500	48.0%
2012	9,926,431	10,249,285	20,175,716	49.2%
2013	9,235,098	10,521,105	19,756,203	46.7%
2014	9,653,120	10,452,170	20,105,290	48.0%
2015	10,453,670	10,504,885	20,958,555	49.9%
2016	11,130,370	10,301,326	21,431,696	51.9%
2017	11,127,432	9,602,708	20,730,140	53.7%
2018	11,332,305	9,443,423	20,775,728	54.5%
2019	12,410,801	10,067,653	22,478,454	55.2%

## William P. Hobby Airport

Fiscal Year	Originating Enplanements	Connecting Enplanements	Total Enplaned Passengers	Originating Enplanement Percentage
2010	3,343,393	1,054,010	4,397,403	76.0%
2011	3,617,541	1,121,642	4,739,183	76.3%
2012	3,906,900	1,221,209	5,128,109	76.2%
2013	3,959,666	1,416,922	5,376,588	73.6%
2014	4,134,726	1,701,165	5,835,891	70.8%
2015	4,271,166	1,674,247	5,945,413	71.8%
2016	4,695,633	1,687,702	6,383,335	73.6%
2017	4,852,811	1,807,446	6,660,257	72.9%
2018	4,829,823	2,107,238	6,937,061	69.6%
2019	4,996,510	2,332,635	7,329,145	68.2%

## Houston Airport System

Fiscal Year	Originating Enplanements	Connecting Enplanements	Total Enplaned Passengers	Originating Enplanement Percentage
2010	12,622,098	11,908,956	24,531,054	51.5%
2011	13,301,314	11,628,369	24,929,683	53.4%
2012	13,833,331	11,470,494	25,303,825	54.7%
2013	13,194,764	11,938,027	25,132,791	52.5%
2014	13,787,846	12,153,335	25,941,181	53.2%
2015	14,724,836	12,179,132	26,903,968	54.7%
2016	15,826,003	11,989,028	27,815,031	56.9%
2017	15,980,243	11,410,154	27,390,397	58.3%
2018	16,162,128	11,550,661	27,712,789	58.3%
2019	17,407,311	12,400,288	29,807,599	58.4%

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

**AIRCRAFT OPERATIONS, LANDING WEIGHT AND CARGO ACTIVITY  
 STATISTICAL SECTION**

Aircraft Operations (in thousands)				Aircraft Landed Weight (in million pounds)		
Fiscal Year	Total	Increase (Decrease)	Percentage Change	Total	Increase (Decrease)	Percentage Change
2010	858	(34)	-3.81%	31,662	(245)	-0.77%
2011	861	3	0.35%	32,536	874	2.76%
2012	838	(23)	-2.67%	32,841	305	0.94%
2013	799	(39)	-4.65%	33,044	203	0.62%
2014	811	12	1.50%	33,881	837	2.53%
2015	816	5	0.62%	34,969	1,088	3.21%
2016	787	(29)	-3.55%	35,519	550	1.57%
2017	760	(27)	-3.43%	34,648	(871)	-2.45%
2018	735	(25)	-3.29%	34,814	166	0.48%
2019	752	17	2.31%	37,210	2,396	6.88%

Cargo Activity (in metric tons)					
Fiscal Year	Domestic Freight	International Freight	Mail	Total Cargo	Year-over-Year Change
2010	195,617	181,453	37,011	414,081	7.0%
2011	205,174	208,748	33,897	447,819	8.1%
2012	203,042	216,893	33,253	453,188	1.2%
2013	203,082	216,693	27,142	446,917	-1.4%
2014	193,776	225,400	27,333	446,509	-0.1%
2015	192,331	252,876	30,026	475,233	6.4%
2016	195,644	205,361	25,713	426,718	-10.2%
2017	209,343	224,226	24,983	458,552	7.5%
2018	231,670	234,384	23,790	489,844	6.8%
2019	270,965	240,260	23,413	534,638	9.1%

## STATISTICAL SECTION

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

PERFORMANCE MEASURES  
STATISTICAL SECTION

Performance Measures	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Revenue per Enplaned Passenger	\$ 21.28	\$ 20.05	\$ 20.05	\$ 20.35	\$ 21.06	\$ 22.10	\$ 22.40	\$ 22.59	\$ 23.25	\$ 22.56
Maintenance and Operations Expenses per Enplaned Passenger	\$ 9.99	\$ 11.40	\$ 10.44	\$ 10.83	\$ 10.99	\$ 10.65	\$ 11.34	\$ 9.29	\$ 12.09	\$ 11.32
Debt Service per Enplaned Passenger	\$ 6.37	\$ 6.81	\$ 6.43	\$ 6.58	\$ 6.47	\$ 6.54	\$ 6.69	\$ 7.06	\$ 6.77	\$ 6.30
Outstanding Debt per Enplaned Passenger (1)	\$ 108.23	\$ 104.06	\$ 97.25	\$ 95.49	\$ 90.11	\$ 86.31	\$ 86.41	\$ 84.43	\$ 80.26	\$ 69.32
Intercontinental Budgeted Airline Cost per Est. Enplaned Passenger (2)	\$ 11.06	\$ 10.42	\$ 10.79	\$ 10.72	\$ 11.21	\$ 11.28	\$ 10.94	\$ 11.31	\$ 11.38	\$ 11.57
Intercontinental Actual Airline Cost per Enplaned Passenger (2)	\$ 10.52	\$ 10.52	\$ 10.39	\$ 10.52	\$ 10.61	\$ 10.56	\$ 10.62	\$ 11.08	\$ 11.39	\$ 10.48
Hobby Budgeted Airline Cost per Est. Enplaned Passenger (2)	\$ 9.44	\$ 7.99	\$ 7.24	\$ 7.34	\$ 7.37	\$ 6.99	\$ 6.76	\$ 6.48	\$ 6.22	\$ 6.52
Hobby Actual Airline Cost per Enplaned Passenger (2)	\$ 8.75	\$ 7.68	\$ 6.63	\$ 6.64	\$ 6.19	\$ 6.43	\$ 7.15	\$ 6.15	\$ 6.40	\$ 6.64

(1) The calculation of outstanding debt per enplaned passenger does not include unamortized discount and premium.

(2) Airline Costs include terminal building charges, aircraft parking apron charges, and landing fees only for passenger carriers. The costs are calculated during the rates and charges process based on budget and estimate of passengers. They are then recalculated, after the annual audit, during the rates and charges reconciliation process. The estimated costs utilized are based on projected results and are subjected to change.



## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

CASH AVAILABLE BY DAYS FUNDED (in thousands)  
STATISTICAL SECTION

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Airport System Revenue Fund (1) (2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operating & Maintenance Reserve	41,417	42,643	43,630	46,397	49,633	50,754	51,615	51,807	52,686	55,845
Renewal & Replacement Fund (3)	19,194	19,777	20,876	11,822	11,822	10,011	10,001	10,514	11,483	18,770
Airports Improvement Fund (3)	403,564	438,368	455,030	460,634	487,974	396,631	449,768	417,930	444,464	410,795
Total cash available for operations	\$ 464,175	\$ 500,788	\$ 519,536	\$ 518,853	\$ 549,429	\$ 457,396	\$ 511,384	\$ 480,251	\$ 508,633	\$ 485,410
Maintenance and operating expense (4) (5)	\$ 245,147	\$ 262,668	\$ 255,507	\$ 252,745	\$ 268,745	\$ 283,557	\$ 314,715	\$ 254,506	\$ 326,889	\$ 325,153
Days in fiscal year	365	365	366	365	365	365	366	365	365	365
Daily cash requirement	\$ 672	\$ 720	\$ 698	\$ 692	\$ 736	\$ 777	\$ 860	\$ 697	\$ 896	\$ 891
Days funded	691	696	744	749	746	589	595	689	568	545
Total Airport System Cash and Investments	\$ 1,045,347	\$ 1,057,458	\$ 1,034,122	\$ 1,087,394	\$ 1,139,956	\$ 1,222,307	\$ 1,248,346	\$ 1,259,622	\$ 1,362,459	\$ 1,456,679

(1) The funds are listed in order of availability; each fund must be fully depleted before the next can be used.

(2) Available funding in the Airport System Revenue Fund on June 30th is transferred to the Airports Improvement Fund to comply with airport bond ordinances.

(3) Excludes cash required for accrued liabilities and capital appropriations.

(4) Excludes capital asset impairments and retirements, and expense incurred on cancelled capital projects. Includes interest expense for the Series 2005 pension obligation bonds and the debt service on the note payable to Southwest Airlines.

(5) Maintenance and operating expense funded by cash available for operations decreased by \$60.2 million between FY2017 and FY2016, primarily due to a \$67.4 million decrease in pension expense associated with pension reform enacted in 2017. Without the reform, it is estimated that days funded at June 30, 2017 would be 557.

STATISTICAL SECTION

**CITY OF HOUSTON, TEXAS**  
**AIRPORT INFORMATION**  
**STATISTICAL SECTION**

**AIRPORT SYSTEM FUND**

	IAH		HOU		EFD (1)	
Location	22 miles N of downtown Houston		7 miles SE of downtown Houston		15 miles SE of downtown Houston	
Area	10,080.10 acres		1,501.9 acres		1,944.60 acres	
Elevation	97 MSL		46 MSL		32 MSL	
Airport Code	IAH		HOU		EFD	
<b>Runways</b>	8R-26L	9,402x150 ft	13L-31R	5,148x100 ft	17L-35R	4,609x80 ft
	9-27	10,000x150 ft	13R-31L	7,602x150 ft	17R-35L	9,001x150 ft
	15L-33R	12,001x150 ft	17-35	6,000x150 ft	4-22	8,001x150 ft
	15R-33L	10,000x150 ft	4-22	7,602x150 ft		
	8L-26R	9,000x150 ft				
<b>Terminal Space</b>	Airlines	2,931,046 sf	Airlines	531,197 sf		
	Tenants	188,306 sf	Tenants	63,672 sf		
	Public/Common	769,716 sf	Public/Common	152,648 sf		n/a
	Mechanical	278,048 sf	Mechanical	115,815 sf		
	Other	208,570 sf	Other	47,615 sf		
Total	4,375,686 sf	Total	910,947 sf			
<b>Number of Gates/Hardstand Positions</b>	128/7		30/n/a		n/a	
<b>Commercial Airlines Apron</b>	4,023,940 sf		681,239 sf		n/a	
<b>Rental Car Facility</b>	10 Rental Car Agencies		12 Rental Car Agencies		1 Rental Car Agency	
<b>Parking Spaces</b>	S-T Hourly	14,821	S-T Hourly	5,611		
	L-T ECO	8,612	L-T ECO	958		
	Employee	2,043	Employee	906	Employee	27
	Total	25,476	Total	7,475	Total	27

Note 1: No scheduled commercial flights.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

EMPLOYEE STAFFING BY FUNCTION  
STATISTICAL SECTION

Department	Full time Equivalent (FTE) Number of Employees (1)									
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Administration	347.8	361.0	329.6	292.3	303.5	314.3	343.0	321.1	304.4	287.4
George Bush Intercontinental (IAH) Operations (2)	851.7	833.9	789.9	755.8	775.6	704.4	630.5	620.4	615.8	609.0
William P. Hobby (HOU) Operations (2)	314.7	300.8	266.6	264.1	260.1	245.6	246.3	244.2	243.9	233.1
Ellington Airport Operations (2)	30.5	30.8	28.9	27.3	29.5	27.7	25.4	25.8	25.9	26.8
Total FTE Employees	1,544.7	1,526.5	1,415.0	1,339.5	1,368.7	1,292.0	1,245.2	1,211.5	1,190.0	1,156.3

Note 1: A full-time employee is scheduled to work 2,080 hours per year (including vacation and sick leave). Full time equivalent employment is calculated by dividing total labor hours including overtime by 2,080.

Note 2: Includes Airside, Landside, Communication Center and Ground Transportation.

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

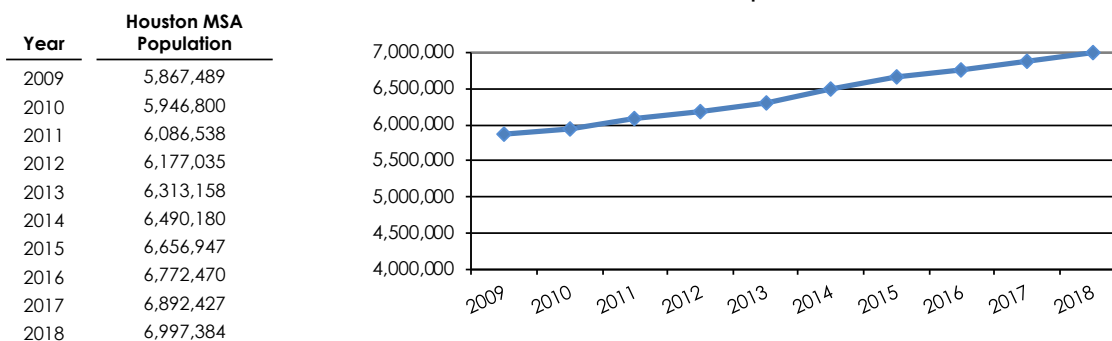
SERVICE AREA/SERVICE AREA POPULATION/PRINCIPAL EMPLOYERS  
STATISTICAL SECTION

The primary service region for the Houston Airport System, the 9-county Houston-The Woodlands-Sugar Land Metropolitan Statistical Area ("MSA"), has a diverse economic base and is recognized as a major national and international energy, financial, medical, transportation, retail, and distribution center. The MSA extends out five additional counties of Matagorda, Trinity, Walker, Washington, and Wharton for the broader The Houston-The Woodlands Combined Statistical Area ("CSA"). According to U.S. Bureau of the Census, the population estimate was 7.00 million for the MSA and 7.20 million for the CSA as of July 1, 2018.

Houston, the nation's fourth most populous city, is the largest in the South. The Houston MSA ranks fifth in population among the nation's metropolitan areas.

## Service Area Population

Houston MSA Population 2009-2018



Source: Greater Houston Partnership and U.S. Census Bureau, Population Division

PRINCIPAL EMPLOYERS  
Current Year and Nine Years Ago

Employer	June 30, 2019			June 30, 2010		
	Employees	Rank	Percentage of Total City Employment	Employees	Rank	Percentage of Total City Employment
Walmart	37,000	1	3.15%			
Memorial Hermann Health System	24,108	2	2.05%	19,500	1	1.95%
HEB	23,732	3	2.02%			
The University of Texas MD Anderson Cancer Center	21,086	4	1.80%			
McDonald's Corp	20,918	5	1.78%			
Houston Methodist	20,000	6	1.70%			
Kroger	16,000	7	1.36%			
United Airlines	14,941	8	1.27%			
Schlumberger	12,069	9	1.03%			
Shell Oil Company	11,507	10	0.98%	13,000	4	1.30%
Continental Airlines, Incorporated				16,000	2	1.60%
ExonMobil				13,000	3	1.30%
United Space Alliance				10,185	5	1.02%
National Oilwell Varco				10,000	6	1.00%
The Methodist Hospital System				9,991	7	1.00%
Baylor College of Medicine				9,232	8	0.92%
HP				9,000	9	0.90%
St. Luke's Episcopal Health System				9,000	10	0.90%
Total	201,361		17.15%	118,908		11.89%

Source: GHP Houston Facts - 2019; Houston newcommerguides.com

Employers excludes school districts and city, county, state and federal governments.

Employee numbers are for the ten-county region, not the city only.

Employee may live outside the City.

Total Houston Residents employed regardless of where they work:

June 2019 Local Area Unemployment Statistics, Bureau of Labor Statistics	2019	1,174,527
U.S. Census Bureau, American community Survey	2010	998,885

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

DEMOGRAPHIC AND ECONOMIC  
STATISTICAL SECTION

Fiscal Year	Population (1)	Personal Income (in thousands) (2)	Per Capita Personal Income (2)	Median Age (2)	Education Level in Years of Formal Schooling (2)	School Enrollment (2)	Average Unemployment Rate (percentage)
2010	2,257,926	\$ 51,886,111	\$ 24,623	32.8	12.4	525,506 (3)	7.0 (2)
2011	2,099,451 (7)	Not available	\$ 26,109	32.2	12.7	560,316 (3)	8.2 (4)
2012	2,145,146	Not available	\$ 26,179 (5)	33.2 (5)	13.0 (5)	576,020 (5)	7.5 (7)
2013	2,160,821	Not available	\$ 26,849 (5)	32.1 (5)	13.0 (3), (5)	548,061 (3)	6.5 (4)
2014	2,195,914	Not available	\$ 27,029 (5)	32.3 (5)	13.0 (5)	557,780 (5)	9.0 (8)
2015	2,239,558	Not available	\$ 27,305 (7)	32.4 (5)	13.0 (3), (5)	564,871 (5)	4.4 (8)
2016	2,296,224 (5)	Not available	\$ 27,938 (5)	32.6 (5)	13.0 (3), (5)	580,250 (5)	5.8 (6)
2017	2,303,482 (5)	Not available	\$ 28,503 (5)	32.6 (5)	13.1 (3), (5)	594,377 (5)	5.7 (6)
2018	2,312,717 (5)	Not available	\$ 29,224 (5)	32.7 (5)	13.2 (3)	597,728 (5)	5.1 (6)
2019	2,325,205 (5)	Not available	\$ 30,547 (5)	32.9 (5)	13.2 (3)	594,916 (5)	4.4 (6)

(1) Source: Population Estimate program, U. S. Census Bureau, as of the beginning of the fiscal year. (Fiscal year 2019 is as of July 1, 2018.)

(2) Source: American Community Survey, U. S. Census Bureau. (Fiscal year 2019 data is for calendar year 2018.)

(3) School enrollment includes nursery school through graduate school.

(4) Source: Local Area Unemployment Statistics, Bureau of Labor Statistics Texas Workforce Commission

(5) Source: U. S. Census Bureau FactFinder

(6) Source: Bureau of Labor Statistics

(7) Source: American FactFinder

(8) Source: Texas Labor Market TRACER

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# COMPLIANCE SECTION

## COMPREHENSIVE ANNUAL FINANCIAL REPORT







**INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH  
REQUIREMENTS APPLICABLE TO THE PASSENGER FACILITY  
CHARGE PROGRAM AND ON INTERNAL CONTROL OVER  
COMPLIANCE IN ACCORDANCE WITH REQUIREMENTS ISSUED BY  
THE FEDERAL AVIATION ADMINISTRATION**

To the Honorable Mayor, Members of City Council  
and City Controller of the City of Houston, Texas

**Report on Compliance**

We have audited the City of Houston, Texas' ("the City") compliance with the types of compliance requirements described in the Passenger Facility Charge Audit Guide for Public Agencies, issued by the Federal Aviation Administration ("the Guide"), that could have a direct and material effect on its Passenger Facility Charge ("PFC") Program for the year ended June 30, 2019.

**Management's Responsibility**

Management is responsible for compliance with the requirements of laws, regulations, contracts and grants applicable to its PFC.

**Auditors' Responsibility**

Our responsibility is to express an opinion on compliance for the City's PFC program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and the Guide. Those standards and the Guide require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the PFC program occurred. An audit includes examining, on a test basis, evidence about the City's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the PFC program; however, our audit does not provide a legal determination on the City's compliance.

To the Honorable Mayor, Members of City Council  
 and City Controller of the City of Houston, Texas

### **Opinion**

In our opinion, the City complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on the PFC program for the year ended June 30, 2019.

### **Report on Internal Control over Compliance**

Management of the City is responsible for establishing and maintaining effective internal control over compliance with the requirements referred to above. In planning and performing our audit of compliance, we considered the City's internal control over compliance with the types of requirements that could have a direct and material effect on the PFC program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the PFC program and to test and report on internal control over compliance in accordance with the Guide, but not for the purpose of expressing an opinion of the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the City's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or to detect and correct, noncompliance with a type of compliance requirement of the Guide on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of the Guide will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a PFC program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Guide. Accordingly, this report is not suitable for any other purpose.



To the Honorable Mayor, Members of City Council  
 and City Controller of the City of Houston, Texas

### Report on Passenger Facility Charge Revenues and Disbursements Schedules

We have audited the basic financial statements of the City, as of and for the year ended June 30, 2019, and have issued our report thereon dated December 17, 2019, which contained an unmodified opinion on those financial statements and a reference to other auditors. Our audit was performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying passenger facility charge revenues and disbursements schedules are presented for purposes of additional analysis as required by the Guide and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the passenger facility charge revenues and disbursements schedules are fairly stated, in all material respects, in relation to the financial statements as a whole.

*McConnell & Jones LLP Banks, Finley, White & Co.*

December 17, 2019

## COMPLIANCE SECTION

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

**PASSENGER FACILITY CHARGE REVENUES AND DISBURSEMENTS SCHEDULE  
 GEORGE BUSH INTERCONTINENTAL AIRPORT (IAH)  
 FOR THE YEAR ENDED JUNE 30, 2019**

	Fiscal Year 2018	Quarter 1			Quarter 2			Quarter 3			Quarter 4			Fiscal Year 2019
	Program Total	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sept	Oct-Dec	Jan-Mar	Apr-Jun	Fiscal Year 2019 Program Total
<b>REVENUES</b>														
Collections (Note 3)	\$ 566,115,988	21,486,622	21,370,982	19,098,350	22,925,293	84,881,247	\$ 650,997,235							
Other revenue-insurance (Note 3)	2,059,629	-	-	-	-	-	-	-	-	-	-	-	-	2,059,629
Interest	9,257,827	791,970	961,125	1,112,854	1,254,642	4,120,591	13,378,418							
Total Revenues	577,433,444	22,278,592	22,332,107	20,211,204	24,179,935	89,001,838	666,435,282							
<b>DISBURSEMENTS</b>														
1.01 Automated People Mover System	\$ 175,338,961	513,314	3,237,965	-	16,906,419	20,657,698	\$ 195,996,659							
1.02 Terminal B Expansion & Improvements	92,938,180	116,806	691,420	-	1,808,994	2,617,220	95,555,400							
1.03 Central FIS Facility	83,119,396	26,750	2,236,450	-	6,635,210	8,898,410	92,017,806							
1.04 North Parallel Runway 8L/26R	28,995,180	-	886,988	-	1,800,342	2,687,330	31,682,510							
1.05 Administrative Costs	112,917	-	-	-	-	-	112,917							
1.06 Central Plant HVAC Upgrades	14,807,635	65,985	339,444	-	650,143	1,055,572	15,863,207							
1.07 Terminal A/B South Taxiways	14,207,845	-	399,850	-	973,057	1,372,907	15,580,752							
Total Disbursements	409,520,114	722,855	7,792,117	-	28,774,165	37,289,137	446,809,251							
Net PFC Revenues	\$ 167,913,330	21,555,737	14,539,990	20,211,204	(4,594,230)	51,712,701	\$ 219,626,031							
PFC Account Balance	\$ 167,913,330	189,469,067	204,009,057	224,220,261	219,626,031	219,626,031	\$ 219,626,031							

Please see Notes to the Passenger Facility Charge Revenues and Disbursements Schedules

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

PASSENGER FACILITY CHARGE REVENUES AND DISBURSEMENTS SCHEDULE  
WILLIAM P. HOBBY AIRPORT (HOU)  
FOR THE YEAR ENDED JUNE 30, 2019

	Fiscal Year 2018 Program Total	Quarter 1 Jul-Sept	Quarter 2 Oct-Dec	Quarter 3 Jan-Mar	Quarter 4 Apr-Jun	Fiscal Year 2019 Total	Fiscal Year 2019 Program Total
<b>REVENUES</b>							
Collections (Note 3)	\$ 182,480,977	6,485,506	6,294,518	6,554,799	6,676,077	26,010,900	\$ 208,491,877
Other revenue-insurance (Note 3)	755,196	-	-	209,500	-	807,268	755,196
Interest	3,331,077	150,904	196,175	-	250,689	-	4,138,345
<b>Total Revenues</b>	<b>186,567,250</b>	<b>6,636,410</b>	<b>6,490,693</b>	<b>6,764,299</b>	<b>6,926,766</b>	<b>26,818,168</b>	<b>213,385,418</b>
<b>DISBURSEMENTS</b>							
1.01 Rehab Runways	3,347,999	-	23,025	-	164,278	187,303	3,535,302
1.02 Rehab & Modification to Taxiways	14,479,333	-	58,606	-	356,413	415,019	14,894,352
1.03 Expand Taxiway Electrical System	3,220,026	-	-	-	-	263,090	3,220,026
1.04 Airt Drainage & Stormwater Improvs	4,112,709	-	66,307	-	196,783	263,090	4,375,799
1.05 Acquire Runway 17 Protection Zone	571,258	-	7,186	-	25,782	32,968	604,226
1.06 Airfield Lighting & Control	7,239,638	-	25,549	-	49,663	75,212	7,314,850
1.07 Central Terminal Expansion	28,550,921	11,414	232,173	-	1,105,146	1,348,733	29,899,654
1.08 Conduct Master Plan	393,948	-	-	-	-	-	393,948
1.09 Central Concourse Equipment	13,094,386	16,575	81,232	-	171,995	269,802	13,364,188
1.10 Apron Reconstruction	3,100,449	21,722	99,177	-	181,806	302,705	3,403,154
1.11 Taxiway & Taxilane Reconstruction	6,490,441	45,473	207,615	-	380,591	633,679	7,124,120
1.12 Overlay Runway 12R/30L	5,184,532	5,803	25,137	-	41,422	72,362	5,256,894
1.13 Perimeter Fencing & Obstruction	1,514,480	222	962	-	1,585	2,769	1,517,249
1.14 Access Controls & Telecom	634,475	6,538	28,326	-	46,675	81,539	716,014
1.15 Environmental Impact Statement	248,359	-	5,307	-	10,505	15,812	264,171
1.16 Land Acquisition RW4 RPZ	592,470	-	1,518	-	9,233	10,751	603,221
1.17 Drainage/Stormwater Plan	1,375,000	-	-	-	-	-	1,375,000
1.18 PFC Consulting, Admin, Audit	97,621	-	-	-	-	-	97,621
Subtotal HOU 1.00 Projects	94,248,045	107,747	862,120	-	2,741,877	3,711,744	97,959,789
2.01 International Terminal Expansion	1,220,196	-	2,174,607	-	4,273,794	6,448,401	7,668,597
2.02 International Terminal - Apron	196,908	-	350,924	-	689,678	1,040,602	1,237,510
2.03 International Terminal - Roadways	3,447,831	-	271,621	-	447,594	719,215	4,167,046
2.04 Elevated passenger walkway	500,099	-	90,525	-	144,340	234,865	734,964
2.05 Satellite utilities plant - Phase I	1,631,960	-	309,923	-	606,472	916,395	2,548,355
2.06 Passenger walkway canopy	-	-	-	-	-	-	-
2.07 Central concourse expansion	45,867,200	465,836	2,713,067	-	6,965,500	10,144,403	56,011,603
2.08 Explosive detection baggage equip.	5,295,282	-	45,807	-	102,017	147,824	5,295,282
2.09 Partial reconstruction R/W 4-22	1,570,474	-	(2,599)	-	(1,441)	(4,040)	1,718,298
2.10 Partial reconstruction Taxiway C	398,148	-	(1,588)	-	(881)	(2,469)	394,108
2.11 Partial reconstruct NE perimeter	243,313	-	(1,588)	-	(881)	(2,469)	240,844
2.12 Air units - central concourse	-	-	-	-	-	-	-
Subtotal HOU 2.00 Projects	60,371,411	465,836	5,952,287	-	13,227,073	19,645,196	80,016,607
<b>Total Disbursements</b>	<b>154,619,456</b>	<b>573,583</b>	<b>6,814,407</b>	<b>-</b>	<b>15,968,950</b>	<b>23,356,940</b>	<b>177,976,396</b>
<b>Net PFC Revenues</b>	<b>\$ 31,947,794</b>	<b>6,062,827</b>	<b>(323,714)</b>	<b>6,764,299</b>	<b>(9,042,184)</b>	<b>3,461,228</b>	<b>\$ 35,409,022</b>
<b>PFC Account Balance</b>	<b>\$ 31,947,794</b>	<b>38,010,621</b>	<b>37,686,907</b>	<b>44,451,206</b>	<b>35,409,022</b>	<b>35,409,022</b>	<b>\$ 35,409,022</b>

Houston Airport System • For fiscal years ended June 30, 2019 and 2018

Please see Notes to the Passenger Facility Charge Revenues and Disbursements Schedules

COMPLIANCE SECTION

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

## NOTES TO PASSENGER FACILITY CHARGE REVENUES AND DISBURSEMENTS SCHEDULES FOR THE YEAR ENDED JUNE 30, 2019

**NOTE 1 - PASSENGER FACILITY CHARGE PROGRAM**

The Passenger Facility Charge ("PFC") was established by Title 49, United States Code ("U.S.C."), Section 40117, which authorizes the Secretary of Transportation (further delegated to the FAA Administrator) to approve the local imposition of an airport PFC of \$1, \$2, \$3, \$4, or \$4.50 per enplaned passenger for use on certain airport projects. Under Part 158, public agencies (as defined in the statute and regulation) controlling commercial service airports can apply to the FAA for authority to impose a PFC for use on eligible projects.

**NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**Basis of Accounting** - The accompanying passenger facility charge revenues and disbursements schedules present revenues received on a cash basis, while expenditures are reported based upon the allocation of costs to approved projects.

**NOTE 3 - RECONCILIATION TO STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**

Passenger facility charges are reported on an accrual basis in the City of Houston Airport System Fund Statement of Revenues, Expenses and changes in Net Position in the Comprehensive Annual Financial Report. Reporting standards adopted by the FAA require for purposes of the PFC Revenues and Disbursements Schedule such charges be reported on a cash basis. A reconciliation between cash collections and revenue reported on the accrual basis is as follows:

<b>Fiscal year 2019</b>	<b>William P. Hobby Airport</b>	<b>George Bush Intercontinental Airport</b>	<b>Airport System Total</b>
Passenger Facility Charges:			
Cash collections per Revenues and Disbursements Schedule	\$ 26,010,900	\$ 84,881,247	\$ 110,892,147
Less prior year accrual	(2,399,524)	(13,774,926)	(16,174,450)
Add current year accrual	<u>2,376,284</u>	<u>14,060,520</u>	<u>16,436,804</u>
Amounts per Statement of Revenues, Expenses and Changes in Net Position	<u>\$ 25,987,660</u>	<u>\$ 85,166,841</u>	<u>\$ 111,154,501</u>

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

PASSENGER FACILITY CHARGE PROGRAM AUDIT SUMMARY  
FOR THE YEAR ENDED JUNE 30, 2019

- |                                                                                                                                                      |                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|
| 1. Type of report issued on PFC financial statements.                                                                                                | Unmodified                        |
| 2. Type of report on PFC compliance.                                                                                                                 | Unmodified                        |
| 3. Quarterly Revenues and Disbursements reconcile with submitted quarterly reports and reported un-liquidated revenue matches actual amounts.        | <u>  X  </u> Yes <u>      </u> No |
| 4. PFC Revenues and Interest are accurately reported.                                                                                                | <u>  X  </u> Yes <u>      </u> No |
| 5. The Public Agency maintains a separate financial accounting record for each application.                                                          | <u>  X  </u> Yes <u>      </u> No |
| 6. Funds disbursed were for PFC-eligible items as identified in the FAA Decision to pay only for the allowable costs of the projects.                | <u>  X  </u> Yes <u>      </u> No |
| 7. Monthly carrier receipts were reconciled with quarterly carrier reports.                                                                          | <u>  X  </u> Yes <u>      </u> No |
| 8. PFC revenues were maintained in a separate interest-bearing capital account or commingled only with other interest-bearing airport capital funds. | <u>  X  </u> Yes <u>      </u> No |
| 9. Serving carriers were notified of PFC program actions/changes approved by the FAA.                                                                | <u>  X  </u> Yes <u>      </u> No |
| 10. Quarterly Reports were transmitted (or available via website) to remitting carriers.                                                             | <u>  X  </u> Yes <u>      </u> No |
| 11. The Public Agency is in compliance with Assurances 5, 6, 7 and 8.                                                                                | <u>  X  </u> Yes <u>      </u> No |
| 12. Project design and implementation are carried out in accordance with Assurance 9.                                                                | <u>  X  </u> Yes <u>      </u> No |
| 13. Program administration is carried out in accordance with Assurance 10.                                                                           | <u>  X  </u> Yes <u>      </u> No |
| 14. For those public agencies with excess revenue, a plan for the use of this revenue has been submitted to the FAA for review and concurrence.      | <u>  X  </u> Yes <u>      </u> No |

## CITY OF HOUSTON, TEXAS

## AIRPORT SYSTEM FUND

**PASSENGER FACILITY CHARGE PROGRAM  
SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
FOR THE YEAR ENDED JUNE 30, 2019****A. SUMMARY OF AUDITORS' RESULTS**

- 1) There were no material weaknesses identified during the audit of the passenger facility charge program.
- 2) There were no significant deficiencies identified during the audit of the passenger facility charge program.
- 3) The auditors' report on compliance for the passenger facility charge program expresses an unmodified opinion.

**B. FINDINGS AND QUESTIONED COSTS**

None reported





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**APPENDIX B-1**

**GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE**

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## APPENDIX B-1

### GLOSSARY OF TERMS AND EXCERPTS OF THE MASTER ORDINANCE

#### Glossary of Terms

“Act” means, collectively, Chapters 1201-1205, 1207, 1371, and 1503, Texas Government Code, as amended.

“Additional Senior Lien Bonds” means the additional senior lien revenue bonds and obligations permitted to be issued by the City pursuant to Section 5.01 of the Master Ordinance.

“Additional Senior Lien Notes” means the additional senior lien revenue notes permitted to be issued by the City pursuant to Section 5.01 of the Master Ordinance.

“Additional Senior Lien Obligations” means Additional Senior Lien Bonds and/or Additional Senior Lien Notes.

“Additional Subordinate Lien Bonds” means the additional subordinate lien revenue bonds, notes and obligations permitted to be issued by the City pursuant to Section 5.01 of the Master Ordinance.

“Airports Improvement Fund” means the fund described in Section 3.14 of the Master Ordinance.

“Airport Management Consultant” means a nationally recognized independent firm, person or corporation having a widely known and favorable reputation for special skill, knowledge and experience in methods of development, operation, financing and management of airports of approximately the same size as the properties constituting the Airport System.

“Airport Obligations” means any or all of the Bonds and Inferior Lien Bonds.

“Airport System” means all airport, heliport and aviation facilities, or any interest therein, now or from time to time hereafter owned, operated or controlled in whole or in part by the City, together with all properties, facilities and services thereof, and all additions, extensions, replacements and improvements thereto, and all services provided or to be provided by the City in connection therewith, but expressly excluding Special Facilities. The Airport System currently includes the present airports of the City, known as “George Bush Intercontinental Airport/Houston,” “William P. Hobby Airport,” and “Ellington Airport” (formerly known as “Ellington Field”).

“Authorized System Purposes” means, collectively, the purposes of establishing, improving, enlarging, extending and repairing the airports of the City or buildings, improvements, landing fields or other facilities or services which are necessary, desirable or convenient for the efficient operation and maintenance of the airports of the City, and acquiring land for the airports of the City, as further described by the Act.

“Aviation Director” means the Director of the Houston Airport System (a department of the City that operates the Airport System), or his successor or person acting in such capacity.

“Bonds” means any or all of the Senior Lien Bonds, Senior Lien Notes, and the Subordinate Lien Bonds, as the context may indicate, including Completion Bonds and Short Term/Demand Obligations.

“Business Day” means any day other than a Saturday, Sunday or other day on which the New York Stock Exchange is closed or on which banks are authorized or required to be closed in any of the City of Houston, Texas, the City of New York, New York, or any other municipality in which the principal office of the applicable Paying Agent/Registrar is located.

“City” means the City of Houston, Texas, and, where appropriate, the City Council thereof, or any successor thereto as the owner and operator of the Airport System.

“Completion Bonds” means each series of Bonds permitted to be issued by the City pursuant to Section 5.03 of the Master Ordinance.

“Credit Agreement” means any agreement between the City and a third party financial institution pursuant to which such third party financial institution issues a letter of credit, municipal bond insurance policy, line of credit, standby bond purchase agreement, surety policy, surety bond or other guarantee for the purpose of enhancing the creditworthiness or liquidity of any of the City’s obligations pursuant to any Airport Obligations or Qualified Hedge Agreements and in consideration for which the City may agree to pay, but solely from Net Revenues as provided herein, (i) periodic payments for the availability of such Credit Agreement and/or (ii) reimbursements or repayments of any amounts advanced under such Credit Agreement, together with interest and other stipulated costs and charges related to such amounts advanced. Obligations of the City pursuant to a Credit Agreement shall be deemed to be, and shall be included within, the Debt Service Requirements for the series of Airport Obligations to which the Credit Agreement relates. Further, obligations of the City to make payments under a Credit Agreement as reimbursements or repayments of amounts paid or advanced under such Credit Agreement for interest on or principal of any Airport Obligations (including interest and other stipulated costs and charges related to such amounts advanced) shall be deemed to be payments of interest on or principal of such Airport Obligations. Each Credit Agreement (and related Credit Agreement Obligations) shall be deemed to be a part of the Airport Obligations of the series to which it relates for the purpose of securing its payment or repayment by the pledge of Net Revenues as provided in Articles III, V and VI of the Master Ordinance. However, unless otherwise provided in any Supplemental Ordinance, issuers of Credit Agreements shall not be treated as Owners of Airport Obligations for purposes of any voting rights to approve amendments or to direct the exercise of any remedies under the Master Ordinance.

“Credit Agreement Obligations” means Airport Obligations held by or on behalf of the provider of a credit or liquidity facility in the form of a credit agreement loan, credit agreement note or other obligation of a provider of a Credit Agreement.

“Debt Service Requirements” means, as of any date of calculation, an amount equal to the sum of the following for any period and with respect to all or any portion of the Airport Obligations:

A. Current interest scheduled to accrue during such period on such Airport Obligations, except to the extent that provision for the payment of such interest has been made by (i) appropriating for such purpose amounts sufficient to provide for the full and timely payment of such interest either from proceeds of Airport Obligations, from interest earned or to be earned thereon, from other Airport System funds other than Net Revenues, or from any combination of such sources and (ii) depositing such amounts (except in the case of interest to be earned, which shall be deposited as received) into a fund or account for capitalized interest, the proceeds of which are required to be transferred as needed into the Senior Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Interest and Sinking Fund or the Inferior Lien Bond Interest and Sinking Fund, as the case may be;

Plus

B. That portion of the principal amount of, or compounded interest on, such Airport Obligations scheduled to be payable on or before the next July 1 (either at maturity, by reason of amortization of bank bonds, or by reason of scheduled mandatory redemptions, but after taking into account all prior optional and mandatory bond redemptions) which would accrue if such principal amount were deemed to accrue daily in equal amounts from the next preceding July 1;

Less

C. In addition to (and without duplicating) the amounts credited under paragraph A. above, any portion or all of the interest on or principal of Airport Obligations which has been irrevocably committed by the City to be paid from other Airport System funds other than Net Revenues, including but not limited to PFC Revenues or Excluded Fee and Charge Revenues;

provided, however, that the following rules shall apply to the computation of Debt Service Requirements on certain series of Short Term/Demand Obligations and on any series of Airport Obligations bearing interest at a floating or variable rate:

(i) For any series of Short Term/Demand Obligations issued pursuant to a commercial paper program or similar program, Debt Service Requirements shall be computed on the assumption that the principal amount shall continuously be refinanced under such program and remain outstanding until the first Fiscal Year for which interest on such Short Term/Demand Obligations has not been capitalized or otherwise funded or provided for, at which time (which shall not be beyond the term of such program) it shall be assumed that the outstanding principal amount thereof shall be refinanced with a series of Airport Obligations which shall be assumed to be amortized over a period not to exceed 25 years and shall be assumed to be amortized in such a manner that the maximum Debt Service Requirements in any twelve (12) month period shall not exceed 110% of the minimum Debt Service Requirements for any other twelve (12) month period, and shall be assumed to bear interest at a fixed interest rate estimated by the City's financial advisor or underwriter to be the interest rate such series of Airport Obligations would bear if issued on such terms on the date of such estimate;

(ii) For any series of Airport Obligations bearing interest at a variable or adjustable rate or a rate to be negotiated or revised from time to time such that the actual future rate of interest thereon cannot be ascertained at the time of calculation, it shall be assumed that such Airport Obligations will bear interest at the higher of (1) a long-term interest rate estimated by the City's financial advisor or underwriter to be the average rate of interest such Airport Obligations would bear if issued as long-term bonds bearing interest at fixed interest rates to be amortized over 30 years with level debt service or (2) a short-term interest rate calculated as follows: (a) for any series of Airport Obligations then Outstanding, at the greater of (i) the average interest rate derived from the variable or adjustable interest rate formula or computation applicable to, or average interest rate borne by, such series of Airport Obligations during a twelve (12) month period ending within 30 days prior to the date of computation or (ii) the actual interest rate derived from such variable or adjustable interest rate formula or computation, or the actual interest rate payable on such series of Airport Obligations, on the date of such calculation, and (b) for any series of Airport Obligations then proposed to be issued, at an interest rate estimated by the City's financial advisor or underwriter to be the average rate of interest such series of Airport Obligations will bear during the period or periods for which the Debt Service Requirements are being calculated.

Debt Service Requirements shall be calculated on the assumption that no Airport Obligations Outstanding on the date of calculation will cease to be Outstanding except by reason of the payment of scheduled principal maturities or scheduled mandatory redemptions of such Airport Obligations, except as provided above for Short Term/Demand Obligations.

Credit Agreements shall cause Debt Service Requirements to be increased only to the extent of scheduled payments and charges for the availability of the Credit Agreement without regard to any repayment or reimbursement obligations or interest thereon or other stipulated costs or charges related thereto.

Qualified Hedge Agreements shall cause Debt Service Requirements to be (i) increased by the amount of any scheduled payments and charges for the availability of the Qualified Hedge Agreement, (ii) decreased by the amount of any scheduled interest payments on the related Airport Obligations which the City's financial advisor certifies to be substantially hedged pursuant to the Qualified Hedge Agreement, and (iii) increased by the gross payments of the City under the Qualified Hedge Agreement (without regard to netting); provided, however, that any variable or adjustable payment obligation of the City under the Qualified Hedge Agreement shall be deemed to be a fixed rate obligation based upon the provisions contained in paragraph (ii) of the definition of Debt Service Requirements, as certified by the City's financial advisor.

"Excluded Fee and Charge Revenues" means all income and revenues derived from fees and charges imposed by any City ordinance adopted after July 1, 2007 and declared in such ordinance to constitute fees and charges of the kind that will generate Excluded Fee and Charge Revenues. Such Excluded Fee and Charge Revenues may be authorized pursuant to any federal, state or local authority and may include, but not be limited to, any charge or fee

relating to providing, enhancing or maintaining security for the Airport System or any fee or charge imposed on any commercial cargo activity of the Airport System.

“Federal Payments” means those funds received by the Airport System from the federal government or any agency thereof as payments for the use of any facilities or services of the Airport System.

“Fiscal Year” means the City’s fiscal year as from time to time designated by the City, which is currently July 1 to June 30.

“Funds” means any fund or account established or maintained under the Master Ordinance, including but not limited to the Revenue Fund, the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund and the accounts created therein, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund and the accounts created therein, the Inferior Lien Bond Interest and Sinking Fund, the Inferior Lien Bond Reserve Fund and the accounts created therein, the Operation and Maintenance Reserve Fund, the Renewal and Replacement Fund and the Airports Improvement Fund.

“Gross Revenues” means all income and revenues derived directly or indirectly by the City from the operation and use of and otherwise pertaining to the Airport System, or any part thereof, whether resulting from extensions, enlargements, repairs, betterments or other improvements to the Airport System, or otherwise, and includes, except to the extent hereinafter expressly excluded, all revenues received by the City from the Airport System, including, without limitation, all rentals, rates, fees and other charges for the use of the Airport System, or for any service rendered by the City in the operation thereof, interest and other income realized from the investment or deposit of amounts credited to any fund required to be maintained pursuant to the Master Ordinance or any other ordinance authorizing the issuance of Airport Obligations. Gross Revenues expressly exclude:

- (i) proceeds of any Airport Obligations;
- (ii) interest or other investment income derived from Airport Obligation proceeds deposited to the credit of any construction fund, or applied to fund capitalized interest, or interest or investment income required to be retained in the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Reserve Fund, the Operation and Maintenance Reserve Fund or any escrow fund in order to accumulate therein any amount or balance required to be accumulated or maintained therein pursuant to any ordinance authorizing any series of Airport Obligations;
- (iii) any monies received as grants, appropriations, or gifts, the use of which is limited by the grantor or donor to the construction or acquisition of Airport System facilities, except to the extent any such monies shall be received as payments for the use of the Airport System facilities;
- (iv) any revenues derived from any Special Facilities which are pledged to the payment of Special Facilities Bonds;
- (v) insurance proceeds other than loss of use or business interruption insurance proceeds;
- (vi) the proceeds of any passenger facility charge or other per-passenger charge as may be hereafter authorized under federal law, including, but not limited to, those revenues defined as PFC Revenues;
- (vii) sales and other taxes collected by the Airport System on behalf of the State of Texas and any other taxing entities;
- (viii) Federal Payments received by the Airport System unless the City first receives an opinion from nationally recognized bond counsel to the effect that such payments, if included in Gross Revenues, would not cause the interest on the Airport Obligations to be includable within the gross income of the Owners thereof for federal income tax purposes;



- (ix) the net proceeds received by the City from the disposition of any Airport System property;
- (x) any Excluded Fee and Charge Revenues; and
- (xi) any Taxable Bond Credit Revenues.

“Inferior Lien Bonds” means each series of inferior lien bonds Outstanding from time to time issued pursuant to the Prior Ordinances or any additional Inferior Lien Bonds issued pursuant to a Supplemental Ordinance payable from and secured in whole or in part by a lien on and pledge of Net Revenues junior and subordinate to the lien on Net Revenues securing payment of the Senior Lien Obligations and Subordinate Lien Bonds.

“Net Revenues” means that portion of the Gross Revenues remaining after the deduction of the Operation and Maintenance Expenses.

“Operation and Maintenance Expenses” means all reasonable and necessary current expenses of the City, paid or accrued, of operating, maintaining and repairing the Airport System, including, without limitation, those reasonably allocated City overhead expenses relating to the administration, operation and maintenance of the Airport System; insurance and fidelity bond premiums; payments to pension and other funds and to any self insurance fund not in excess of premiums which would otherwise be required for such insurance; any general and excise taxes or other governmental charges imposed by entities other than the City; costs of contractual and professional services, labor, materials and supplies for current operations, including the costs of such direct City services rendered to the Airport System as are requested from the City by the Airport System and as are reasonably necessary for the operation of the Airport System; costs of issuance of Airport Obligations for the Airport System (except to the extent paid from the proceeds thereof); fiduciary costs; costs of collecting and refunding Gross Revenues; utility costs; any lawful refunds of any Gross Revenues; and all other administrative, general and commercial expenses, but excluding:

- (a) any allowance for depreciation;
- (b) costs of capital improvements;
- (c) reserves for major capital improvements, Airport System operations, maintenance or repair;
- (d) any allowance for redemption of, or payment of interest or premium on, Airport Obligations;
- (e) any liabilities incurred in acquiring or improving properties of the Airport System;
- (f) expenses of lessees under Special Facilities Leases and operation and maintenance expenses pertaining to Special Facilities to the extent they are required to be paid by such lessees pursuant to the terms of the Special Facilities Leases;
- (g) any charges or obligations incurred in connection with any lawful Airport System purpose, including the lease, acquisition, operation or maintenance of any facility or property benefiting the Airport System, provided that the payment of such charges or obligations is expressly agreed by the payee to be payable solely from proceeds of the Airports Improvement Fund;
- (h) liabilities based upon the City’s negligence or other grounds not based on contract; and
- (i) so long as Federal Payments are excluded from Gross Revenues, an amount of expenses that would otherwise constitute Operation and Maintenance Expenses for such period equal to the Federal Payments for such period.

Operation and Maintenance Expenses shall only include those current expenses due or payable within the next 30 days.

“Outstanding” when used with reference to the Senior Lien Bonds, Senior Lien Notes, Subordinate Lien Bonds, or Inferior Lien Bonds, as the case may be, means, as of a particular date, all such bonds or notes theretofore and thereupon delivered except: (a) any such bond or note cancelled by or on behalf of the City at or before said date; (b) any such bond or note defeased pursuant to the defeasance provisions of the ordinance authorizing its issuance, or otherwise defeased as permitted by applicable law; and (c) any such bond or note in lieu of or in substitution for which another bond or note shall have been delivered pursuant to the ordinance authorizing the issuance of such bond or note.

“Owner” or “Registered Owner,” when used with respect to any Airport Obligation, means the person or entity in whose name such bond or note is registered in the register maintained by the paying agent for such series of bonds or notes. Any reference to a particular percentage or proportion of the Owners shall mean the Owners at a particular time of the specified percentage or proportion in aggregate principal amount of all Senior Lien Bonds, Senior Lien Notes, Subordinate Lien Bonds or Inferior Lien Bonds then Outstanding under the Master Ordinance and any Supplemental Ordinance authorizing their issuance.

“PFC Revenues” means, during any Fiscal Year, proceeds of any charges and fees collected by the Airport System, including passenger facility charges collected by the City, pursuant to the authority granted by the Aviation Safety and Capacity Expansion Act of 1990 and 14 CFR Part 158, as amended from time to time, in respect to any component of the Airport System, and interest earnings thereon.

“Prior Ordinances” means City Ordinance Nos: 98-904, 2000-878, 2002-656, 2007-287, 2009-600, 2010-893, 2011-484, 2012-100, 2013-1064 and 2015-1004, pursuant to which the City has previously issued certain bonds, notes and obligations secured by and payable from the Net Revenues.

“Qualified Hedge Agreement” means any agreement between the City and a qualifying financial institution (as described in the following sentence) for the purpose of providing an interest rate swap, exchange, cap, collar, floor, forward or other hedging mechanism, arrangement or security, however denominated, expressly identified pursuant to its terms as being entered into in connection with and in order to hedge interest rate fluctuations on any portion of any Airport Obligations and in consideration for which the City may agree to pay, but solely from Net Revenues as herein provided, (i) periodic payments for the availability of such Qualified Hedge Agreement and/or (ii) net amounts as a result of fluctuation in hedged interest rates or in the value of any index of payment and/or (iii) termination charges. A Qualified Hedge Agreement may only be entered into with a financial institution that has long-term credit ratings or the obligations of which are unconditionally guaranteed by a financial institution with long-term credit ratings in one of the two highest generic rating categories by two of the nationally recognized rating services then rating the Airport Obligations. Obligations of the City pursuant to a Qualified Hedge Agreement shall be included within the definition of Debt Service Requirements for the series of Airport Obligations to which the Qualified Hedge Agreement relates. Further, obligations of the City to make payments under a Qualified Hedge Agreement derived from or resulting from a fluctuation in hedged interest rates or in the value of any index of payment shall be deemed to be payments of interest on the Airport Obligations so hedged. Each Qualified Hedge Agreement shall be deemed to be a part of the Airport Obligations of the series to which it relates for the purpose of securing its payment by the pledge of Net Revenues as provided in Articles III, V and VI of the Master Ordinance. However, issuers of and counterparties to Qualified Hedge Agreements shall not be treated as Owners of Airport Obligations for purposes of any voting rights to approve amendments or direct the exercise of any remedies under the Master Ordinance.

“Renewal and Replacement Fund” means the fund described in Section 3.13 of the Master Ordinance.

“Renewal and Replacement Fund Requirement” means Ten Million Dollars (\$10,000,000) or any greater amount required by any Supplemental Ordinance.

“Reserve Fund Non-Participants” means, with respect to any Airport Obligations, any series designated as “Reserve Fund Non-Participants” and secured by a lien on an account of the applicable reserve fund that is created and held for the sole benefit of that series of Airport Obligations.

“Reserve Fund Participants” means:

(i) with respect to Senior Lien Bonds, any series of Senior Lien Bonds designated by the City as “Reserve Fund Participants” and secured by a lien on the Senior Lien Bond Reserve Fund Participant Account of the Senior Lien Bond Reserve Fund, and

(ii) with respect to Senior Lien Notes, any series of Senior Lien Notes secured by a lien on the Senior Lien Note Reserve Fund Participant Account of the Senior Lien Bond Reserve Fund, and

(iii) with respect to the Subordinate Lien Bonds, any series of Subordinate Lien Bonds designated by the City as “Reserve Fund Participants” and secured by a lien on the Subordinate Lien Bond Reserve Fund Participant Account of the Subordinate Lien Bond Reserve Fund, and

(iv) with respect to the Inferior Lien Bonds, any series of Inferior Lien Bonds designated by the City as “Reserve Fund Participants” and secured by a lien on the Inferior Lien Bond Reserve Fund Participant Account of the Inferior Lien Bond Reserve Fund.

“Reserve Fund Requirement” means the amount required to be maintained in the Senior Lien Bond Reserve Fund (and the accounts therein), the Subordinate Lien Bond Reserve Fund (and the accounts therein), or the Inferior Lien Bond Reserve Fund (and the accounts therein), as the case may be, as further set forth in the applicable Supplemental Ordinance and/or officers pricing certificate authorizing one or more series of Airport Obligations. Upon the issuance of any series of Airport Obligations, the amount of the Reserve Fund Requirement for such Airport Obligations shall be as set forth in the related Supplemental Ordinance or officers pricing certificate.

A. For Senior Lien Notes, such amount shall be computed and recomputed upon the issuance of each series of Senior Lien Notes to be the arithmetic average of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Senior Lien Notes then Outstanding, including the series of Senior Lien Notes then being issued.

B. For Senior Lien Bonds that are Reserve Fund Participants, such amount shall be computed upon the issuance of each series of Senior Lien Bonds that are Reserve Fund Participants and on each date on which Senior Lien Bonds that are Reserve Fund Participants are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Senior Lien Bonds then Outstanding that are Reserve Fund Participants.

C. For any series of Senior Lien Bonds that are Reserve Fund Non-Participants, such amount shall be computed upon the issuance of such series of Senior Lien Bonds and on each date on which any of such series of Senior Lien Bonds are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for such Senior Lien Bonds then Outstanding.

D. For Subordinate Lien Bonds that are Reserve Fund Participants, such amount shall be computed and recomputed upon the issuance of each series of Subordinate Lien Bonds that are Reserve Fund Participants and on each date on which Subordinate Lien Bonds that are Reserve Fund Participants are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Subordinate Lien Bonds then Outstanding that are Reserve Fund Participants, including any series of Subordinate Lien Bonds then being issued that are Reserve Fund Participants.

E. For any series of Subordinate Lien Bonds that are Reserve Fund Non-Participants, such amount shall be computed upon the issuance of such series of Subordinate Lien Bonds and on each date on which any of such series of Subordinate Lien Bonds are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for such series of Subordinate Lien Bonds then Outstanding.

F. For Inferior Lien Bonds that are Reserve Fund Participants, such amount shall be computed and recomputed upon the issuance of each series of Inferior Lien Bonds that are Reserve Fund Participants and on each date on which Inferior Lien Bonds that are Reserve Fund Participants are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Inferior Lien Bonds then Outstanding that are Reserve Fund Participants, including any series of Inferior Lien Bonds then being issued that are Reserve Fund Participants.

G. For any series of Inferior Lien Bonds that are Reserve Fund Non-Participants, such amount shall be computed upon the issuance of such series of Inferior Lien Bonds and on each date on which any of such series of Inferior Lien Bonds are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for such series of Inferior Lien Bonds then Outstanding.

“Senior Lien Bonds” means each series of senior lien bonds Outstanding from time to time issued pursuant to the Prior Ordinances or any Additional Senior Lien Bonds issued pursuant to a Supplemental Ordinance payable from and secured by a lien on and pledge of Net Revenues.

“Senior Lien Notes” means each series of senior lien notes Outstanding from time to time issued pursuant to the Prior Ordinances or any Additional Senior Lien Notes issued pursuant to a Supplemental Ordinance payable from and secured by a lien on and pledge of Net Revenues.

“Senior Lien Obligations” means either or both of the Senior Lien Bonds and the Senior Lien Notes, as applicable.

“Short Term/Demand Obligations” means each series of bonds, notes and other obligations issued pursuant to Section 5.02 of the Master Ordinance, (a) the payment of principal of which is either (i) payable on demand by or at the option of the holder at a time sooner than a date on which such principal is deemed to be payable for purposes of computing Debt Service Requirements, or (ii) scheduled to be payable within one year from the date of issuance and is contemplated to be refinanced for a specified period or term through the issuance of additional Short Term/Demand Obligations pursuant to a commercial paper or other similar financing program, and (b) the purchase price, payment or refinancing of which is additionally secured by a letter of credit, line of credit, standby bond purchase agreement, bond insurance, surety bond or other credit or liquidity facility which does not impose upon the City a reimbursement obligation payable over a period shorter than three years.

“Special Facilities” means structures, hangars, aircraft overhaul, maintenance or repair shops, heliports, hotels, storage facilities, garages, in-flight kitchens, training facilities, consolidated rental car facilities, terminal facilities, cargo facilities and any and all other facilities and appurtenances being a part of or related to the Airport System, the cost of the construction or other acquisition of which is financed with the proceeds of Special Facilities Bonds.

“Special Facilities Bonds” means any bonds heretofore or from time to time hereafter issued by the City pursuant to Section 5.05 of the Master Ordinance.

“Special Facilities Lease” means any lease or agreement, howsoever denominated, pursuant to which Special Facilities are leased by the City to the lessee in consideration for which the lessee agrees to pay (i) all debt service on the Special Facilities Bonds issued to finance the Special Facilities (which payments are pledged to secure the Special Facilities Bonds) and (ii) the operation and maintenance expenses of the Special Facilities.

“Subordinate Lien Bond Interest and Sinking Fund” means the fund established pursuant to the Prior Ordinances and ratified, confirmed and maintained pursuant to Sections 3.04 and 3.08 of the Master Ordinance.

“Subordinate Lien Bond Reserve Fund” means the fund, including the accounts established therein, established pursuant to the Prior Ordinances and ratified, confirmed and maintained pursuant to Sections 3.04 and 3.09 of the Master Ordinance.

“Subordinate Lien Bond Reserve Fund Participant Account” means the account within the Subordinate Lien Bond Reserve Fund established pursuant to the Prior Ordinances and ratified, confirmed and maintained pursuant to Sections 3.04 and 3.09 of the Master Ordinance.

“Subordinate Lien Bond Reserve Fund Surety Policy” means, whether heretofore or hereafter acquired, for the purpose of satisfying all or any part of the Reserve Fund Requirement for the Subordinate Lien Bonds, any one or more of a surety bond, insurance policy or letter of credit in a principal amount equal to the amount required to be funded, provided that, at the time of deposit, either the rating for the long-term unsecured debt of the issuer of such surety bond, insurance policy or letter of credit or the rating for obligations insured, secured or guaranteed by such issuer are required to be in one of the two highest letter categories by at least one major municipal securities evaluation service (or, if such entities are no longer in existence, by comparable services) and which surety bond, insurance policy or letter of credit shall be payable on demand of the City for the benefit of the Owners of the Subordinate Lien Bonds that are secured thereby.

“Subordinate Lien Bonds” means each series of subordinate lien bonds Outstanding from time to time issued pursuant to the Prior Ordinances or any Additional Subordinate Lien Bonds issued pursuant to a Supplemental Ordinance payable from and secured by a lien on and pledge of Net Revenues junior and subordinate to the lien and pledge securing the Senior Lien Obligations.

“Supplemental Ordinance,” as used in the Master Ordinance, means any ordinance supplementing the Master Ordinance to provide for the issuance of Airport Obligations or any other obligations authorized by the Master Ordinance. The term “Supplemental Ordinance” is defined in the forepart of this Official Statement to mean the particular Supplemental Ordinance authorizing the Series 2018 Bonds.

“Taxable Bond Credit Revenues” means payments made to the City from the federal government or any agency or department thereof with respect to the return to the City of a portion of the interest paid by the City on any taxable Bonds, including but not limited to any such payments received pursuant to the American Recovery and Reinvestment Act of 2009 or any legislation in amendment or succession thereto.

### **Excerpts of the Master Ordinance**

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## ARTICLE II

### ESTABLISHMENT OF THE FINANCING PROGRAM

**SECTION 2.01 MASTER ORDINANCE.** This Master Ordinance hereby sets forth the terms, conditions, covenants and provisions for the security of obligations to be issued hereafter by the City for Authorized System Purposes and secured by a senior, subordinate or inferior lien on Net Revenues.

**SECTION 2.02 SUPPLEMENTAL ORDINANCES.** Each series of Airport Obligations issued hereafter shall be issued pursuant to the terms and conditions of this Master Ordinance and a Supplemental Ordinance that shall provide the specific terms, conditions, covenants and provisions relating to each such series of Airport Obligations, including, without limitation, (i) the authorization, issuance, sale, delivery, form, title, characteristics, interest rate(s) (which may be fixed, variable, adjustable or computed by any other method), (ii) the provisions for payment, redemption, transfer and exchange and any other matters related thereto (including, without limitation, matters related to the delegation of the sale to an authorized representative of the City and the execution and delivery of a Credit Agreement or Qualified Hedge Agreement, if any), (iii) the application of proceeds, (iv) the funding of any Reserve Fund Requirement and the designation of Reserve Fund Participants, if any, and (v) covenants relating to the federal income tax status.

## ARTICLE III

## SECURITY AND SOURCE OF PAYMENT FOR ALL BONDS

## SECTION 3.01 PLEDGE AND SOURCE OF PAYMENT.

(a) The City hereby covenants and agrees that all Gross Revenues shall be deposited and paid into the special funds established under the Prior Ordinances and incorporated and confirmed herein for all purposes, and shall be applied in the manner hereinafter set forth to provide for the payment of all Operation and Maintenance Expenses of the Airport System and all principal, interest and any redemption premiums on the Airport Obligations and all expenses of providing for their full and timely payment in accordance with their terms.

(b) The Senior Lien Obligations shall constitute special obligations of the City that shall be payable from, and shall be equally and ratably secured by a lien on, the Net Revenues. Such Net Revenues, together with certain proceeds of the Senior Lien Obligations or other lawfully available funds of the City, shall, in the manner herein provided, be set aside for and pledged to the payment of the Senior Lien Obligations in the Senior Lien Bond Interest and Sinking Fund and the Senior Lien Bond Reserve Fund as hereinafter provided. For the benefit of the Owners of the Senior Lien Obligations, the City hereby grants a lien on the Net Revenues and further grants a lien on the Senior Lien Bond Interest and Sinking Fund to secure the payment of principal of, redemption premium, if any, and interest on the Senior Lien Obligations and all expenses of providing for their full and timely payment in accordance with their terms. Additionally, to further assure the payment of principal of, redemption premium, if any, and interest on the Senior Lien Obligations:

(i) the City hereby grants a lien on the Senior Lien Note Reserve Fund Participant Account of the Senior Lien Bond Reserve Fund for the additional benefit of Owners of the Senior Lien Notes;

(ii) the City hereby grants a lien on the Senior Lien Bond Reserve Fund Participant Account of the Senior Lien Bond Reserve Fund for the additional benefit of Owners of the Senior Lien Bonds that are Reserve Fund Participants; and

(iii) the City has created a separate account and shall create one or more additional separate accounts within the Senior Lien Bond Reserve Fund and has granted and shall grant a lien on such account(s) for the additional benefit of the Owners of any one or more series of Senior Lien Bonds that are Reserve Fund Non-Participants.

Except with respect to the separate accounts of the Senior Lien Bond Reserve Fund described in this Section 3.01(b), all Senior Lien Obligations shall be in all respects on a parity with and of equal dignity with one another. The Owners of the Senior Lien Obligations shall never have the right to demand payment of either the principal of, interest on or any redemption premium on the Senior Lien Obligations out of any funds raised or to be raised by taxation.

(c) The Subordinate Lien Bonds shall constitute special obligations of the City that shall be payable from, and, subject to the prior and superior lien of the Senior Lien Obligations, shall be equally and ratably secured by a lien on, the Net Revenues. Such Net Revenues, together with certain proceeds of the Subordinate Lien Bonds or other lawfully available funds of the City, shall, in the manner herein provided, be set aside for and pledged to the payment of the Subordinate Lien Bonds in the Subordinate Lien Bond Interest and Sinking Fund and the Subordinate Lien Bond Reserve Fund as hereinafter provided. For the benefit of the Owners of the Subordinate Lien Bonds, the City hereby grants a lien on the Net Revenues (subject to the prior and superior lien of the Senior Lien Obligations) and further grants a lien on the Subordinate Lien Bond Interest and Sinking Fund to secure the payment of principal of, redemption premium, if any, and interest on the Subordinate Lien Bonds and all expenses of providing for their full and timely payment in accordance with their terms. Additionally, to further assure the payment of principal of, redemption premium, if any, and interest on the Subordinate Lien Bonds:

(i) the City hereby grants a lien on the Subordinate Lien Bond Reserve Fund Participant Account of the Subordinate Lien Bond Reserve Fund for the additional benefit of Owners of the Subordinate Lien Bonds that are Reserve Fund Participants; and

(ii) the City shall create one or more separate accounts within the Subordinate Lien Bond Reserve Fund and grant a lien on such account(s) for the additional benefit of the Owners of any one or more series of Subordinate Lien Bonds that are Reserve Fund Non-Participants.

Except with respect to the separate accounts of the Subordinate Lien Bond Reserve Fund described in this Section 3.01(c), all Subordinate Lien Bonds shall be in all respects on a parity with and of equal dignity with one another. The Owners of the Subordinate Lien Bonds shall never have the right to demand payment of either the principal of, interest on or any redemption premium on the Subordinate Lien Bonds out of any funds raised or to be raised by taxation.

(d) The Inferior Lien Bonds shall constitute special obligations of the City that shall be payable from, and, subject to the prior and superior liens of the Senior Lien Obligations and the Subordinate Lien Bonds, shall be equally and ratably secured by a lien on, the Net Revenues. Such Net Revenues, together with certain proceeds of the Inferior Lien Bonds or other lawfully available funds of the City, shall, in the manner herein provided, be set aside for and pledged to the payment of the Inferior Lien Bonds in the Inferior Lien Bond Interest and Sinking Fund and the Inferior Lien Bond Reserve Fund as hereinafter provided. For the benefit of the Owners of the Inferior Lien Bonds, the City hereby grants a lien on the Net Revenues (subject to the prior and superior liens of the Senior Lien Obligations and the Subordinate Lien Bonds) and further grants a lien on the Inferior Lien Bond Interest and Sinking Fund to secure the payment of principal of, redemption premium, if any, and interest on the Inferior Lien Bonds and all expenses of providing for their full and timely payment in accordance with their terms. Additionally, to further assure the payment of principal of, redemption premium, if any, and interest on the Inferior Lien Bonds:

(i) the City hereby grants a lien on the Inferior Lien Bond Reserve Fund Participant Account of the Inferior Lien Bond Reserve Fund for the additional benefit of Owners of the Inferior Lien Bonds that are Reserve Fund Participants; and

(ii) the City shall create one or more separate accounts within the Inferior Lien Bond Reserve Fund and grant a lien on such account(s) for the additional benefit of the Owners of any one or more series of Inferior Lien Bonds that are Reserve Fund Non-Participants.

Except with respect to the separate accounts of the Inferior Lien Bond Reserve Fund described in this Section 3.01(d), all Inferior Lien Bonds shall be in all respects on a parity with and of equal dignity with one another. The Owners of the Inferior Lien Bonds shall never have the right to demand payment of either the principal of, interest on or any redemption premium on the Inferior Lien Bonds out of any funds raised or to be raised by taxation.

(e) Pursuant to Chapter 1208, Texas Government Code, the liens on Net Revenues created hereunder are valid, effective, and perfected.

**SECTION 3.02 ANNUAL BUDGET.** So long as any Airport Obligations remain Outstanding, the Aviation Director shall, prior to the commencement of each Fiscal Year, prepare and deliver to the Mayor, for submission to the City Council, a recommended annual budget for the Airport System for such Fiscal Year which contains detailed estimates of Gross Revenues, Operation and Maintenance Expenses, Net Revenues and Debt Service Requirements for such Fiscal Year, classified in a manner consistent with the definitional and accounting requirements contained herein, and which contains a computation demonstrating that the estimate of Net Revenues set forth therein is in compliance with the rate covenant contained in Section 3.03 below. The City shall adopt annual budgets for the Airport System for each Fiscal Year, each of which shall contain an estimate of revenues and only such budgeted expenditures as will produce Net Revenues in an amount not less than the Net Revenues necessary to comply with the rate covenant in Section 3.03 below. After the adoption of the annual Airport System budget by the City, the total expenditures for Operation and Maintenance Expenses will not exceed the total expenditures authorized for such purposes by such budget, as it may from time to time be amended.

**SECTION 3.03 RATE COVENANT.**

(a) The City covenants that it will at all times fix, charge, impose and collect rentals, rates, fees and other charges for the use of the Airport System, and, to the extent it legally may do so, revise the same as may be

necessary or appropriate, in order that in each Fiscal Year the Net Revenues will at all times be at least sufficient to equal the larger of either:

(i) all amounts required to be deposited in such Fiscal Year to the credit of the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund and the Inferior Lien Bond Reserve Fund; or

(ii) an amount not less than (1) 125% of the Debt Service Requirements for the Outstanding Senior Lien Obligations for such Fiscal Year, plus (2) 110% of the Debt Service Requirements for the Outstanding Subordinate Lien Bonds for such Fiscal Year, plus (3) 100% of the Debt Service Requirements for the Outstanding Inferior Lien Bonds for such Fiscal Year.

(b) If the Net Revenues in any Fiscal Year are less than the amounts specified above, the City, promptly upon receipt of the annual audit for such Fiscal Year, must request an Airport Management Consultant to make its recommendations, if any, as to a revision of the City's rentals, rates, fees and other charges, its Operation and Maintenance Expenses or the method of operation of the Airport System in order to satisfy as quickly as practicable the foregoing requirements. Copies of such request and the recommendations of the Airport Management Consultant, if any, shall be filed with the City Secretary. So long as the City substantially complies in a timely fashion with the recommendations of the Airport Management Consultant, the City will not be deemed to have defaulted in the performance of its duties under this Master Ordinance even if the resulting Net Revenues are not sufficient to be in compliance with the covenant set forth above, so long as there is no other default hereunder.

#### SECTION 3.04 SPECIAL FUNDS.

(a) The following special funds have been established pursuant to the Prior Ordinances and are hereby ratified and confirmed, and shall be maintained and accounted for as hereinafter provided so long as any of the Airport Obligations remain Outstanding:

- (i) Revenue Fund;
- (ii) Senior Lien Bond Interest and Sinking Fund;
- (iii) Senior Lien Bond Reserve Fund;
- (iv) Subordinate Lien Bond Interest and Sinking Fund;
- (v) Subordinate Lien Bond Reserve Fund;
- (vi) Inferior Lien Bond Interest and Sinking Fund;
- (vii) Inferior Lien Bond Reserve Fund;
- (viii) Operation and Maintenance Reserve Fund;
- (ix) Renewal and Replacement Fund; and
- (x) Airports Improvement Fund.

(b) The Revenue Fund, the Operation and Maintenance Reserve Fund, the Renewal and Replacement Fund and the Airports Improvement Fund shall be maintained as separate funds or accounts on the books of the City,



and all amounts credited to such Funds shall be maintained in an official depository bank of the City or in a trustee bank designated by the City. The Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund and the Inferior Lien Bond Reserve Fund shall be maintained at an official depository bank of the City or in a trustee bank designated by the City separate and apart from all other funds and accounts of the City.

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(e) Subordinate Lien Bond Interest and Sinking Fund. The Subordinate Lien Bond Interest and Sinking Fund shall constitute a trust fund which shall be held in trust for the Owners of the Subordinate Lien Bonds to which they are pledged and the proceeds of which (other than the interest income thereon, which may be transferred to the Revenue Fund or, if such interest income is earned on amounts that are capitalized interest financed with proceeds of Subordinate Lien Bonds, to such other Fund as permitted under federal tax law) shall be pledged to the payment of such Subordinate Lien Bonds.

(f) Subordinate Lien Bond Reserve Fund. The Subordinate Lien Bond Reserve Fund and any accounts created therein shall constitute trust funds which shall be held in trust for the Owners of the particular Subordinate Lien Bonds to which they are pledged and the proceeds of which (other than the interest income thereon, which shall be transferred to the extent provided in Section 3.09(c)) shall be pledged to the payment of the Subordinate Lien Bonds. Within the Subordinate Lien Bond Reserve Fund, there has been established and there is hereby ratified and confirmed a Subordinate Lien Bond Reserve Fund Participant Account, and there may be created other designated accounts therein.

(i) Subordinate Lien Bond Reserve Fund Participant Account. The Subordinate Lien Bond Reserve Fund Participant Account shall constitute a trust fund and shall be held in trust for Owners of the Subordinate Lien Bonds that are Reserve Fund Participants. The proceeds of the Subordinate Lien Bond Reserve Fund Participant Account (other than the interest income thereon, which shall be transferred to the extent provided in Section 3.09(c)) shall be pledged to the payment of the Subordinate Lien Bonds that are Reserve Fund Participants.

(ii) Additional Subordinate Lien Bonds May Be Participants or Non-Participants. The City may issue Additional Subordinate Lien Bonds which may be designated as Reserve Fund Participants. The City also reserves the right to issue Additional Subordinate Lien Bonds which may be designated as Reserve Fund Non-Participants and are not secured by the Subordinate Lien Bond Reserve Fund Participant Account; provided that the City shall create a separate account(s) within the Subordinate Lien Bond Reserve Fund for the benefit of any such series that is a Reserve Fund Non-Participant, the proceeds of which account (other than the interest income thereon, which shall be transferred to the extent provided in Section 3.09(c)) shall be pledged to the payment of such Reserve Fund Non-Participant.

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(j) The City reserves the right to create additional funds and additional accounts within any Fund as necessary or desirable in furtherance of the intent and purpose of this Master Ordinance, including the purpose of causing the supplemental funding of any reserve fund.

**SECTION 3.05 REVENUE FUND; FLOW OF FUNDS.** All Gross Revenues shall be deposited as received into the Revenue Fund. In addition, the City may deposit into the Revenue Fund any Federal Payments, provided that, so long as such Federal Payments are excluded from the definition of Gross Revenues, such Federal Payments shall be applied solely to the payment of Operation and Maintenance Expenses. Moneys from time to time credited to the Revenue Fund shall be applied in the following order of priority:

(a) First, to pay and to provide by encumbrance for the payment of all current Operation and Maintenance Expenses;

- (b) Second, to transfer all amounts to the Senior Lien Bond Interest and Sinking Fund required by this Master Ordinance and any Supplemental Ordinance;
- (c) Third, to transfer all amounts to the Senior Lien Bond Reserve Fund required by this Master Ordinance and any Supplemental Ordinance;
- (d) Fourth, to transfer all amounts to the Subordinate Lien Bond Interest and Sinking Fund required by this Master Ordinance and any Supplemental Ordinance;
- (e) Fifth, to transfer all amounts to the Subordinate Lien Bond Reserve Fund required by this Master Ordinance and any Supplemental Ordinance;
- (f) Sixth, to transfer all amounts to the Inferior Lien Bond Interest and Sinking Fund required by this Master Ordinance and any Supplemental Ordinance;
- (g) Seventh, to transfer all amounts to the Inferior Lien Bond Reserve Fund required by this Master Ordinance and any Supplemental Ordinance;
- (h) Eighth, to transfer all amounts to the Operation and Maintenance Reserve Fund required by this Master Ordinance and any Supplemental Ordinance;
- (i) Ninth, to transfer all amounts to the Renewal and Replacement Fund required by this Master Ordinance and any Supplemental Ordinance; and
- (j) Tenth, the balance shall be transferred to the Airports Improvement Fund.

#### SECTION 3.06 SENIOR LIEN BOND INTEREST AND SINKING FUND.

(a) On or before the last Business Day of each month so long as any Senior Lien Obligations remain Outstanding, after making all required payments and provision for payment of Operation and Maintenance Expenses, there shall be transferred to the Senior Lien Bond Interest and Sinking Fund from the Revenue Fund the following amounts:

- (i) Such amounts as shall be necessary so that the balance in the Senior Lien Bond Interest and Sinking Fund equals the Debt Service Requirements on all Senior Lien Obligations accrued to the end of the current month; plus
- (ii) Such amounts as shall be necessary to enable the City to pay when due all expenses of providing for the full and timely payment of the principal of, premium, if any, and interest on the Senior Lien Obligations in accordance with their terms, including without limitation, all fees charged or obligations incurred in connection with any Credit Agreements, Qualified Hedge Agreements and other related agreements in connection with the Senior Lien Obligations.

(b) Whenever the total amounts on deposit to the credit of the Senior Lien Bond Interest and Sinking Fund and the Senior Lien Bond Reserve Fund shall be equivalent to the sum of the aggregate principal amount of all Outstanding Senior Lien Obligations plus the aggregate amount of all interest accrued and to accrue thereon, no further transfers need be made into the Senior Lien Bond Interest and Sinking Fund or the Senior Lien Bond Reserve Fund, and such Senior Lien Obligations shall not be regarded as being Outstanding except for the purpose of being paid with the moneys credited to such Funds. Moneys credited to the Senior Lien Bond Interest and Sinking Fund shall be used solely for the purpose of paying principal (at maturity or prior redemption or to purchase Senior Lien Obligations issued as term bonds in the open market to be credited against mandatory redemption requirements), interest and redemption premiums on the Senior Lien Obligations, plus all bank charges and other costs and expenses relating to such payment, including those described in clause (a)(ii) above. On or before each principal and/or interest payment

date on the Senior Lien Obligations, the City shall transfer from the Senior Lien Bond Interest and Sinking Fund to the Paying Agent/Registrar(s) for the Senior Lien Obligations an amount equal to the principal, interest and redemption premiums payable on the Senior Lien Obligations on such date, including all amounts due and payable on Credit Agreements, Qualified Hedge Agreements and other related agreements in connection with such Senior Lien Obligations.

#### SECTION 3.07 SENIOR LIEN BOND RESERVE FUND.

(a) Maintenance of Reserve Fund Requirement for Participants and Non-Participants. The City shall establish and maintain as hereinafter provided a balance in the Senior Lien Bond Reserve Fund Participant Account and a balance in the Senior Lien Note Reserve Fund Participant Account equal to the Reserve Fund Requirement for the Senior Lien Bonds and the Senior Lien Notes, respectively, that are secured thereby. Each Supplemental Ordinance authorizing Senior Lien Obligations shall designate such series of Senior Lien Obligations authorized thereby as “Reserve Fund Participants” or “Reserve Fund Non-Participants.” With respect to any series of Senior Lien Bonds that are Reserve Fund Non-Participants, pursuant to the Supplemental Ordinance authorizing such Senior Lien Bonds, the City shall establish an account within the Senior Lien Bond Reserve Fund for the benefit of such Senior Lien Bonds and shall maintain an amount in such account equal to the Reserve Fund Requirement for each such series of Senior Lien Bonds secured thereby.

(b) Reserve Fund Requirement at Issuance. Each increase in the Reserve Fund Requirement resulting from the issuance of any Additional Senior Lien Obligations shall be satisfied at the time of issuance and delivery of such series of Additional Senior Lien Obligations. The Reserve Fund Requirement shall be satisfied by depositing to the credit of the Senior Lien Bond Reserve Fund Participant Account (in the case of Additional Senior Lien Bonds that are Reserve Fund Participants) or the Senior Lien Note Reserve Fund Participant Account (in the case of Additional Senior Lien Notes) or such other designated accounts (in the case of Additional Senior Lien Bonds that are Reserve Fund Non-Participants) of the Senior Lien Bond Reserve Fund either:

(i) proceeds of such Additional Senior Lien Obligations or other lawfully appropriated funds in not less than the amount which, together with investment earnings thereon as estimated by the City, will be sufficient to fund fully the Reserve Fund Requirement by no later than the end of the period of time for which the payment of interest on such Additional Senior Lien Obligations has been provided out of proceeds of such Additional Senior Lien Obligations or investment earnings thereon as estimated by the City or from other lawfully available funds other than Net Revenues; or

(ii) a Senior Lien Bond Reserve Fund Surety Policy.

(c) Deficiencies and Excess in the Senior Lien Bond Reserve Fund. In any month in which any account of the Senior Lien Bond Reserve Fund contains less than the applicable Reserve Fund Requirement (or so much thereof as shall then be required to be therein if the City has elected to accumulate the Reserve Fund Requirement for any series of Additional Senior Lien Obligations as above provided), then on or before the last Business Day of such month, after making all required payments and provision for payment of Operation and Maintenance Expenses, and after making all required transfers to the Senior Lien Bond Interest and Sinking Fund, there shall be transferred on a pro rata basis into the Senior Lien Bond Reserve Fund Participant Account (in the case of Senior Lien Bonds that are Reserve Fund Participants) and the Senior Lien Note Reserve Fund Participant Account (in the case of Senior Lien Notes) and such other designated accounts (in the case of Senior Lien Bonds that are Reserve Fund Non-Participants) of the Senior Lien Bond Reserve Fund from the Revenue Fund, such amounts as shall be required to permit the City to pay all reimbursement obligations under the Senior Lien Bond Reserve Fund Surety Policies allocable to the Senior Lien Bond Reserve Fund Participant Account or Senior Lien Note Reserve Fund Participant Account or such other designated accounts, as applicable, within a twelve (12) month period and such additional amounts as shall be sufficient to enable the City within a twelve (12) month period to reestablish in the Senior Lien Bond Reserve Fund Participant Account or Senior Lien Note Reserve Fund Participant Account or such other designated accounts, as applicable, the Reserve Fund Requirement for the Senior Lien Bonds or Senior Lien Notes secured thereby; provided, however, that in the event that such monthly transfer requirements ever exceed one-twelfth (1/12th) of the maximum Debt Service Requirements scheduled to occur in any future Fiscal Year on all Senior Lien Obligations then Outstanding, any remaining required transfers shall be accomplished pursuant to Section 3.15 below. After such amounts have been accumulated in the Senior Lien Bond Reserve Fund Participant Account and Senior Lien Note

Reserve Fund Participant Account and such other designated accounts (as described above), and so long thereafter as such accounts contain such amounts, no further transfers shall be required to be made into the Senior Lien Bond Reserve Fund Participant Account or Senior Lien Note Reserve Fund Participant Account or such other designated accounts, and, to the extent any excess is attributable to the portion of the Senior Lien Bond Reserve Fund allocable to any tax-exempt Senior Lien Obligations, any excess amounts in such accounts shall be transferred to the Senior Lien Bond Interest and Sinking Fund or such other Fund as may be permitted by federal tax law, and otherwise shall be transferred to the Revenue Fund. But, if and whenever the balance in the Senior Lien Bond Reserve Fund Participant Account or Senior Lien Note Reserve Fund Participant Account or such other designated accounts is reduced below such amount, monthly transfers to such accounts shall be resumed and continued in such amounts as shall be required to restore the Senior Lien Bond Reserve Fund Participant Account and the Senior Lien Note Reserve Fund Participant Account or such other designated accounts, as applicable, to the applicable Reserve Fund Requirement within a twelve (12) month period.

(d) Account for Senior Lien Bond Reserve Fund Participants. The Senior Lien Bond Reserve Fund Participant Account shall be used to pay the principal of and interest on the Senior Lien Bonds that are Reserve Fund Participants at any time when there is not sufficient money available in the Senior Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Senior Lien Bond Reserve Fund Surety Policy, unless provided otherwise in each of the Senior Lien Bond Reserve Fund Surety Policies allocable to the Senior Lien Bond Reserve Fund Participant Account) and to repay amounts drawn under any Senior Lien Bond Reserve Fund Surety Policy allocable to the Senior Lien Bond Reserve Fund Participant Account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Senior Lien Bond Reserve Fund Surety Policy. The Senior Lien Bond Reserve Fund Participant Account may also be used to make the final payments for the retirement or defeasance of all Senior Lien Bonds then Outstanding that are secured thereby.

(e) Account for Senior Lien Note Reserve Fund Participants. The Senior Lien Note Reserve Fund Participant Account shall be used to pay the principal of and interest on the Senior Lien Notes at any time when there is not sufficient money available in the Senior Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Senior Lien Bond Reserve Fund Surety Policy, unless provided otherwise in each of the Senior Lien Bond Reserve Fund Surety Policies allocable to the Senior Lien Note Reserve Fund Participant Account) and to repay amounts drawn under any Senior Lien Bond Reserve Fund Surety Policy allocable to the Senior Lien Note Reserve Fund Participant Account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Senior Lien Bond Reserve Fund Surety Policy. The Senior Lien Note Reserve Fund Participant Account may also be used to make the final payments for the retirement or defeasance of all Senior Lien Notes then Outstanding that are secured thereby.

(f) Accounts for Senior Lien Bond Reserve Fund Non-Participants. With respect to any series of Senior Lien Bonds that are Reserve Fund Non-Participants, any account created within the Senior Lien Bond Reserve Fund for the benefit of such series of Senior Lien Bonds shall be used to pay the principal of and interest on such series of Senior Lien Bonds at any time when there is not sufficient money available in the Senior Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Senior Lien Bond Reserve Fund Surety Policy, unless provided otherwise in each of the Senior Lien Bond Reserve Fund Surety Policies allocable to such account) and to repay amounts drawn under any Senior Lien Bond Reserve Fund Surety Policy allocable to such account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Senior Lien Bond Reserve Fund Surety Policy. Any such account may also be used to make the final payments for the retirement and defeasance of the series of Senior Lien Bonds then Outstanding that are secured thereby.

(g) Draws on Senior Lien Bond Reserve Fund Surety Policies. The City directs and requires the Paying Agent/Registrar for any series of Senior Lien Obligations to ascertain the necessity for a claim or draw upon the applicable Senior Lien Bond Reserve Fund Surety Policy, and to provide notice to the issuer thereof in accordance with its terms, and to make such claims or draws thereon as may be necessary to provide for the timely payment of principal of and interest on the Senior Lien Obligations to which it pertains.

#### SECTION 3.08 SUBORDINATE LIEN BOND INTEREST AND SINKING FUND.

(a) On or before the last Business Day of each month so long as any Subordinate Lien Bonds remain Outstanding, after making all required payments and provision for payment of Operation and Maintenance Expenses and making all required transfers to the Senior Lien Bond Interest and Sinking Fund and the Senior Lien Bond Reserve Fund, there shall be transferred into the Subordinate Lien Bond Interest and Sinking Fund from the Revenue Fund the following amounts:

(i) Such amounts as shall be necessary so that the balance in the Subordinate Lien Bond Interest and Sinking Fund equals the Debt Service Requirements on all Subordinate Lien Bonds accrued to the end of the current month; plus

(ii) Such amounts as shall be necessary to enable the City to pay when due all expenses of providing for the full and timely payment of the principal of, premium, if any, and interest on the Subordinate Lien Bonds in accordance with their terms, including without limitation, all fees charged or obligations incurred in connection with any Credit Agreements, Qualified Hedge Agreements and other related agreements in connection with the Subordinate Lien Bonds.

(b) Whenever the total amounts on deposit to the credit of the Subordinate Lien Bond Interest and Sinking Fund and the Subordinate Lien Bond Reserve Fund shall be equivalent to the sum of the aggregate principal amount of all Outstanding Subordinate Lien Bonds plus the aggregate amount of all interest accrued and to accrue thereon, no further transfers need be made into the Subordinate Lien Bond Interest and Sinking Fund or the Subordinate Lien Bond Reserve Fund, and such Subordinate Lien Bonds shall not be regarded as being Outstanding except for the purpose of being paid with the moneys credited to such Funds. Moneys credited to the Subordinate Lien Bond Interest and Sinking Fund shall be used solely for the purpose of paying principal (at maturity or prior redemption or to purchase Subordinate Lien Bonds issued as term bonds in the open market to be credited against mandatory redemption requirements), interest and redemption premiums on the Subordinate Lien Bonds, plus all bank charges and other costs and expenses relating to such payment, including those described in clause (a)(ii) above. On or before each principal and/or interest payment date on the Subordinate Lien Bonds, the City shall transfer from the Subordinate Lien Bond Interest and Sinking Fund to the Paying Agent/Registrar(s) for the Subordinate Lien Bonds an amount equal to the principal, interest and redemption premiums payable on the Subordinate Lien Bonds on such date, including all amounts due and payable on Credit Agreements, Qualified Hedge Agreements and other related agreements in connection with such Subordinate Lien Bonds.

#### SECTION 3.09 SUBORDINATE LIEN BOND RESERVE FUND.

(a) Maintenance of Reserve Fund Requirement for Participants and Non-Participants. The City shall establish and maintain as hereinafter provided a balance in the Subordinate Lien Bond Reserve Fund Participant Account equal to the Reserve Fund Requirement for the Subordinate Lien Bonds that are secured thereby. Each Supplemental Ordinance authorizing Subordinate Lien Bonds shall designate such series of Subordinate Lien Bonds authorized thereby as "Reserve Fund Participants" or "Reserve Fund Non-Participants." With respect to any series of Subordinate Lien Bonds that are Reserve Fund Non-Participants, pursuant to the Supplemental Ordinance authorizing such Subordinate Lien Bonds, the City shall establish an account within the Subordinate Lien Bond Reserve Fund for the benefit of such Subordinate Lien Bonds and shall maintain an amount in such account equal to the Reserve Fund Requirement for each such series of Subordinate Lien Bonds secured thereby.

(b) Reserve Fund Requirement at Issuance. Each increase in the Reserve Fund Requirement resulting from the issuance of any Additional Subordinate Lien Bonds shall be satisfied at the time of issuance and delivery of such series of Additional Subordinate Lien Bonds. The Reserve Fund Requirement shall be satisfied by depositing to the credit of the Subordinate Lien Bond Reserve Fund Participant Account (in the case of Additional Subordinate Lien Bonds that are Reserve Fund Participants) or such other designated accounts (in the case of Additional Subordinate Lien Bonds that are Reserve Fund Non-Participants) of the Subordinate Lien Bond Reserve Fund either:

(i) proceeds of such Additional Subordinate Lien Bonds or other lawfully appropriated funds in not less than the amount which, together with investment earnings thereon as estimated by the City, will be sufficient to fund fully the Reserve Fund Requirement by no later than the end of the period of time for which the payment of interest on such Additional Subordinate Lien Bonds has been provided out of proceeds

of such Additional Subordinate Lien Bonds or investment earnings thereon as estimated by the City or from other lawfully available funds other than Net Revenues; or

(ii) a Subordinate Lien Bond Reserve Fund Surety Policy.

(c) Deficiencies and Excess in the Subordinate Lien Bond Reserve Fund. In any month in which any account of the Subordinate Lien Bond Reserve Fund contains less than the applicable Reserve Fund Requirement (or so much thereof as shall then be required to be therein if the City has elected to accumulate the Reserve Fund Requirement for any series of Additional Subordinate Lien Bonds as above provided), then on or before the last Business Day of such month, after making all required payments and provision for payment of Operation and Maintenance Expenses, and after making all required transfers to the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund and the Subordinate Lien Bond Interest and Sinking Fund, there shall be transferred on a pro rata basis into the Subordinate Lien Bond Reserve Fund Participant Account (in the case of Subordinate Lien Bonds that are Reserve Fund Participants) and such other designated accounts (in the case of Subordinate Lien Bonds that are Reserve Fund Non-Participants) of the Subordinate Lien Bond Reserve Fund from the Revenue Fund, such amounts as shall be required to permit the City to pay all reimbursement obligations under the Subordinate Lien Bond Reserve Fund Surety Policies allocable to the Subordinate Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable, within a twelve (12) month period and such additional amounts as shall be sufficient to enable the City within a twelve (12) month period to reestablish in the Subordinate Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable, the Reserve Fund Requirement for the Subordinate Lien Bonds secured thereby; provided, however, that in the event that such monthly transfer requirements ever exceed one-twelfth (1/12th) of the maximum Debt Service Requirements scheduled to occur in any future Fiscal Year on all Subordinate Lien Bonds then Outstanding, any remaining required transfers shall be accomplished pursuant to Section 3.15 below. After such amounts have been accumulated in the Subordinate Lien Bond Reserve Fund Participant Account and such other designated accounts (as described above), and so long thereafter as such accounts contain such amounts, no further transfers shall be required to be made into the Subordinate Lien Bond Reserve Fund Participant Account or such other designated accounts, and, to the extent any excess is attributable to the portion of the Subordinate Lien Bond Reserve Fund allocable to any tax-exempt Subordinate Lien Bonds, any excess amounts in such accounts shall be transferred to the Subordinate Lien Bond Interest and Sinking Fund or such other Fund as may be permitted by federal tax law, and otherwise shall be transferred to the Revenue Fund. But, if and whenever the balance in the Subordinate Lien Bond Reserve Fund Participant Account or such other designated accounts is reduced below such amount, monthly transfers to such accounts shall be resumed and continued in such amounts as shall be required to restore the Subordinate Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable, to such amount within a twelve (12) month period.

(d) Account for Subordinate Lien Bond Reserve Fund Participants. The Subordinate Lien Bond Reserve Fund Participant Account shall be used to pay the principal of and interest on the Subordinate Lien Bonds that are Reserve Fund Participants at any time when there is not sufficient money available in the Subordinate Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Subordinate Lien Bond Reserve Fund Surety Policy, unless provided otherwise in each of the Subordinate Lien Bond Reserve Fund Surety Policies allocable to the Subordinate Lien Bond Reserve Fund Participant Account) and to repay amounts drawn under any Subordinate Lien Bond Reserve Fund Surety Policy allocable to such Subordinate Lien Bond Reserve Fund Participant Account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Subordinate Lien Bond Reserve Fund Surety Policy. The Subordinate Lien Bond Reserve Fund Participant Account may also be used to make the final payments for the retirement or defeasance of all Subordinate Lien Bonds then Outstanding that are secured thereby.

(e) Accounts for Subordinate Lien Bond Reserve Fund Non-Participants. With respect to any series of Subordinate Lien Bonds that are Reserve Fund Non-Participants, any account created within the Subordinate Lien Bond Reserve Fund for the benefit of such series of Subordinate Lien Bonds shall be used to pay the principal of and interest on such series of Subordinate Lien Bonds at any time when there is not sufficient money available if the Subordinate Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Subordinate Lien Bond Reserve Fund Surety Policy, unless provided otherwise in each of the Subordinate Lien Bond Reserve Fund Surety Policies allocable to such account) and to repay amounts drawn under any Subordinate Lien Bond Reserve Fund Surety Policy allocable to such

account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Subordinate Lien Bond Reserve Fund Surety Policy. Any such account may also be used to make the final payments for the retirement and defeasance of the series of Subordinate Lien Bonds then Outstanding that are secured thereby.

(f) Draws on Subordinate Lien Bond Reserve Fund Surety Policies. The City directs and requires the Paying Agent/Registrar for any series of Subordinate Lien Bonds to ascertain the necessity for a claim or draw upon the applicable Subordinate Lien Bond Reserve Fund Surety Policy, and to provide notice to the issuer thereof in accordance with its terms, and to make such claims or draws thereon as may be necessary to provide for the timely payment of principal of and interest on the Subordinate Lien Bonds to which it pertains.

#### SECTION 3.10 INFERIOR LIEN BOND INTEREST AND SINKING FUND.

(a) On or before the last Business Day of each month so long as any Inferior Lien Bonds remain Outstanding, after making all required payments and provision for payment of Operation and Maintenance Expenses and making all required transfers to the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund and the Subordinate Lien Bond Reserve Fund, there shall be transferred into the Inferior Lien Bond Interest and Sinking Fund from the Revenue Fund the following amounts:

(i) Such amounts as shall be necessary so that the balance in the Inferior Lien Bond Interest and Sinking Fund equals the Debt Service Requirements on all Inferior Lien Bonds accrued to the end of the current month; plus

(ii) Such amounts as shall be necessary to enable the City to pay when due all expenses of providing for the full and timely payment of the principal of, premium, if any, and interest on the Inferior Lien Bonds in accordance with their terms, including without limitation, all fees charged or obligations incurred in connection with any Credit Agreements, Qualified Hedge Agreements and other related agreements in connection with the Inferior Lien Bonds.

(b) Whenever the total amounts on deposit to the credit of the Inferior Lien Bond Interest and Sinking Fund and the Inferior Lien Bond Reserve Fund shall be equivalent to the sum of the aggregate principal amount of all Outstanding Inferior Lien Bonds plus the aggregate amount of all interest accrued and to accrue thereon, no further transfers need be made into the Inferior Lien Bond Interest and Sinking Fund or the Inferior Lien Bond Reserve Fund, and such Inferior Lien Bonds shall not be regarded as being Outstanding except for the purpose of being paid with the moneys credited to such Funds. Moneys credited to the Inferior Lien Bond Interest and Sinking Fund shall be used solely for the purpose of paying principal (at maturity or prior redemption or to purchase Inferior Lien Bonds issued as term bonds in the open market to be credited against mandatory redemption requirements), interest and redemption premiums on the Inferior Lien Bonds, plus all bank charges and other costs and expenses relating to such payment, including those described in clause (a)(ii) above. On or before each principal and/or interest payment date on the Inferior Lien Bonds, the City shall transfer from the Inferior Lien Bond Interest and Sinking Fund to the Paying Agent/Registrar(s) for the Inferior Lien Bonds an amount equal to the principal, interest and redemption premiums payable on the Inferior Lien Bonds on such date including all amounts due and payable on Credit Agreements, Qualified Hedge Agreements and other related agreements in connection with such Inferior Lien Bonds.

#### SECTION 3.11 INFERIOR LIEN BOND RESERVE FUND.

(a) Maintenance of Reserve Fund Requirement for Participants and Non-Participants. The City shall establish and maintain as hereinafter provided a balance in the Inferior Lien Bond Reserve Fund Participant Account equal to the Reserve Fund Requirement for the Inferior Lien Bonds that are secured thereby. Each Supplemental Ordinance authorizing Inferior Lien Bonds shall designate such series of Inferior Lien Bonds authorized thereby as "Reserve Fund Participants" or "Reserve Fund Non-Participants." With respect to any series of Inferior Lien Bonds that are Reserve Fund Non-Participants, pursuant to the Supplemental Ordinance authorizing such Inferior Lien Bonds, the City shall establish an account within the Inferior Lien Bond Reserve Fund for the benefit of such Inferior Lien Bonds and shall maintain an amount in such account equal to the Reserve Fund Requirement for each such series of Inferior Lien Bonds secured thereby.

(b) Reserve Fund Requirement at Issuance. Each increase in the Reserve Fund Requirement resulting from the issuance of any additional Inferior Lien Bonds shall be satisfied at the time of issuance and delivery of such series of additional Inferior Lien Bonds. The Reserve Fund Requirement shall be satisfied by depositing to the credit of the Inferior Lien Bond Reserve Fund Participant Account (in the case of additional Inferior Lien Bonds that are Reserve Fund Participants) or such other designated accounts (in the case of additional Inferior Lien Bonds that are Reserve Fund Non-Participants) of the Inferior Lien Bond Reserve Fund either:

(i) proceeds of such additional Inferior Lien Bonds or other lawfully appropriated funds in not less than the amount which, together with investment earnings thereon as estimated by the City, will be sufficient to fund fully the Reserve Fund Requirement by no later than the end of the period of time for which the payment of interest on such additional Inferior Lien Bonds has been provided out of proceeds of such additional Inferior Lien Bonds or investment earnings thereon as estimated by the City or from other lawfully available funds other than Net Revenues; or

(ii) an Inferior Lien Bond Reserve Fund Surety Policy.

(c) Deficiencies and Excess in the Inferior Lien Bond Reserve Fund. In any month in which any account of the Inferior Lien Bond Reserve Fund contains less than the applicable Reserve Fund Requirement (or so much thereof as shall then be required to be therein if the City has elected to accumulate the Reserve Fund Requirement for any series of additional Inferior Lien Bonds as above provided), then on or before the last Business Day of such month, after making all required payments and provision for payment of Operation and Maintenance Expenses, and after making all required transfers to the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund and the Inferior Lien Bond Interest and Sinking Fund, there shall be transferred on a pro rata basis into the Inferior Lien Bond Reserve Fund Participant Account (in the case of Inferior Lien Bonds that are Reserve Fund Participants) and such other designated accounts (in the case of Inferior Lien Bonds that are Reserve Fund Non-Participants) of the Inferior Lien Bond Reserve Fund from the Revenue Fund, such amounts as shall be required to permit the City to pay all reimbursement obligations under the Inferior Lien Bond Reserve Fund Surety Policies allocable to the Inferior Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable, within a twelve (12) month period and such additional amounts as shall be sufficient to enable the City within a twelve (12) month period to reestablish in the Inferior Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable, the Reserve Fund Requirement for the Inferior Lien Bonds secured thereby. After such amounts have been accumulated in the Inferior Lien Bond Reserve Fund Participant Account and such other designated accounts (as described above), and so long thereafter as such accounts contain such amounts, no further transfers shall be required to be made into the Inferior Lien Bond Reserve Fund Participant Account or such other designated accounts, and, to the extent any excess is attributable to the portion of the Inferior Lien Bond Reserve Fund allocable to any tax-exempt Inferior Lien Bonds, any excess amounts in such accounts shall be transferred to the Inferior Lien Bond Interest and Sinking Fund or such other Funds as may be permitted by federal tax law, and otherwise shall be transferred to the Revenue Fund. But, if and whenever the balance in the Inferior Lien Bond Reserve Fund Participant Account or such other designated accounts is reduced below such amount, monthly transfers to such accounts shall be resumed and continued in such amounts as shall be required to restore the Inferior Lien Bond Reserve Fund Participant Account or such other designated accounts, as applicable, to such amount within a twelve (12) month period.

(d) Account for Inferior Lien Bond Reserve Fund Participants. The Inferior Lien Bond Reserve Fund Participant Account shall be used to pay the principal of and interest on the Inferior Lien Bonds that are Reserve Fund Participants at any time when there is not sufficient money available in the Inferior Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Inferior Lien Bond Reserve Fund Surety Policies, unless provided otherwise in each of the Inferior Lien Bond Reserve Fund Surety Policies allocable to the Inferior Lien Bond Reserve Fund Participant Account) and to repay amounts drawn under any Inferior Lien Bond Reserve Fund Surety Policy allocable to such Inferior Lien Bond Reserve Fund Participant Account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Inferior Lien Bond Reserve Fund Surety Policy. The Inferior Lien Bond Reserve Fund Participant Account may also be used to make the final payments for the retirement or defeasance of all Inferior Lien Bonds then Outstanding that are secured thereby.



(e) Accounts for Inferior Lien Bond Reserve Fund Non-Participants. With respect to any series of Inferior Lien Bonds that are Reserve Fund Non-Participants, any account created within the Inferior Lien Bond Reserve Fund for the benefit of such series of Inferior Lien Bonds shall be used to pay the principal of and interest on such series of Inferior Lien Bonds at any time when there is not sufficient money available if the Inferior Lien Bond Interest and Sinking Fund for such purpose (with the requirement that all cash and investments on deposit in such account be depleted before drawing upon any Inferior Lien Bond Reserve Fund Surety Policy, unless provided otherwise in each of the Inferior Lien Bond Reserve Fund Surety Policies allocable to such account) and to repay amounts drawn under any Inferior Lien Bond Reserve Fund Surety Policy allocable to such account for such purpose, together with interest thereon, in accordance with the terms of the City's reimbursement obligations incurred in connection with such Inferior Lien Bond Reserve Fund Surety Policy. Any such account may also be used to make the final payments for the retirement and defeasance of the series of Inferior Lien Bonds then Outstanding that are secured thereby.

(f) Draws on Inferior Lien Bond Reserve Fund Surety Policies. The City directs and requires the Paying Agent/Registrar for any series of Inferior Lien Bonds to ascertain the necessity for a claim or draw upon the applicable Inferior Lien Bond Reserve Fund Surety Policy, and to provide notice to the issuer thereof in accordance with its terms, and to make such claims or draws thereon as may be necessary to provide for the timely payment of principal of and interest on the Inferior Lien Bonds to which it pertains.

**SECTION 3.12 OPERATION AND MAINTENANCE RESERVE FUND.** The City shall fund and maintain as hereinafter provided a balance of money and investments in the Operation and Maintenance Reserve Fund at least equal to two (2) months' current Operation and Maintenance Expenses, which amount shall annually be redetermined by the Aviation Director at the time the department submits its recommended budget for the Airport System pursuant to Section 3.02 based upon either such official's recommended budget for Operation and Maintenance Expenses or such official's estimate of actual Operation and Maintenance Expenses for the then current Fiscal Year.

On or before the last Business Day of each month, after making all required payments and provision for payment of Operation and Maintenance Expenses and all required transfers to the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund, and the Inferior Lien Bond Reserve Fund, there shall be transferred from the Revenue Fund, to the extent amounts are available therein, to the Operation and Maintenance Reserve Fund the amount required to reestablish the required balance in the Operation and Maintenance Reserve Fund. Amounts from time to time credited to the Operation and Maintenance Reserve Fund may be used at any time first, to pay for any Operation and Maintenance Expenses for which amounts are not otherwise available in the Revenue Fund; second, to pay any costs or expenses payable from the Renewal and Replacement Fund for which there are insufficient amounts in the Renewal and Replacement Fund; and third, to the extent any amounts are remaining, to be transferred to the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund or the Inferior Lien Bond Reserve Fund, to the extent of any deficiency therein.

**SECTION 3.13 RENEWAL AND REPLACEMENT FUND.** The City shall fund and maintain as hereinafter provided a balance of money and investments in the Renewal and Replacement Fund at least equal to the Renewal and Replacement Fund Requirement. On or before the last Business Day of each month, if the Renewal and Replacement Fund contains less than the Renewal and Replacement Fund Requirement, then after making all required payments and provision for payment of Operation and Maintenance Expenses and all required transfers to the Senior Lien Bond Interest and Sinking Fund, to the Senior Lien Bond Reserve Fund, to the Subordinate Lien Bond Interest and Sinking Fund, to the Subordinate Lien Bond Reserve Fund, to the Inferior Lien Bond Interest and Sinking Fund, to the Inferior Lien Bond Reserve Fund, and to the Operation and Maintenance Reserve Fund, there shall be transferred from the Revenue Fund, to the extent funds are available therein, an amount equal to one-twelfth (1/12th) of the deficiency (being the amount by which the Renewal and Replacement Fund Requirement exceeded the unappropriated balance therein) as of the last day of the previous Fiscal Year, to the Renewal and Replacement Fund and, at the discretion of the City, to pay directly from the Revenue Fund any other costs that could be paid from amounts on deposit in the Renewal and Replacement Fund. Such transfers shall be required to be made into the Renewal and Replacement Fund until such time as the Renewal and Replacement Fund Requirement has again been accumulated in the Renewal and Replacement Fund.

Amounts from time to time credited to the Renewal and Replacement Fund may be used at any time:

- (a) First, to pay for any costs of replacing depreciable property and equipment of the Airport System and making repairs, replacements or renovations of the Airport System;
- (b) Second, to pay any Operation and Maintenance Expenses for which insufficient amounts are available in the Revenue Fund and the Operation and Maintenance Reserve Fund; and
- (c) Third, to the extent any amounts are remaining, to be transferred to the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund, or the Inferior Lien Bond Reserve Fund, to the extent of any deficiency therein.

#### SECTION 3.14 AIRPORTS IMPROVEMENT FUND.

- (a) After making all payments and transfers hereinabove required, all amounts remaining in the Revenue Fund shall be transferred to the Airports Improvement Fund. Amounts credited to the Airports Improvement Fund may be used only for lawful Airport System purposes, including without limitation, to pay for any capital expenditures, to pay costs of replacing any depreciable property or equipment of the Airport System, to make any major or extraordinary repairs, replacements or renewals of the Airport System, to acquire land or any interest therein, to pay any lease or contractual obligations not paid as Operation and Maintenance Expenses, and to make any transfers required to cure any deficiencies in the Renewal and Replacement Fund; provided, however, that any unappropriated, unbudgeted, unreserved or otherwise unencumbered amounts in the Airports Improvement Fund in excess of (i) the unfunded portion of the Airport System's capital improvement program for the next 24 months as approved by the City Council or as proposed by the Aviation Director or (ii) \$50,000,000, whichever is greater, may be used by the City for any lawful purpose permitted by the laws of the United States of America and the State of Texas and not inconsistent with the terms and provisions of any federal grants or aid or any contracts to which the City is a party.
- (b) The Airport System may create, within the Airports Improvement Fund, additional sub-accounts and funds, including a Capital Outlay Fund. All such sub-accounts and funds may be established and used for the purposes of the Airports Improvement Fund as above provided in subsection (a).

SECTION 3.15 DEFICIENCIES IN FUNDS. If in any month there shall not be transferred into any Fund maintained pursuant to this Article the full amounts required herein, amounts equivalent to such deficiency shall be set apart and transferred to such Fund or Funds from the first available and unallocated moneys in the Revenue Fund, and such transfer shall be in addition to the amounts otherwise required to be transferred to such Funds during any succeeding month or months.

#### SECTION 3.16 INVESTMENT OF FUNDS; TRANSFER OF INVESTMENT INCOME.

- (a) Money in the Revenue Fund, the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund, the Inferior Lien Bond Reserve Fund, the Operation and Maintenance Reserve Fund, the Renewal and Replacement Fund and the Airports Improvement Fund shall, at the option of the City, be invested in time deposits or certificates of deposit secured in the manner required by law for public funds, or be invested in direct obligations of, or obligations the principal of and interest on which are unconditionally guaranteed by, the United States of America, in obligations of any agencies or instrumentalities of the United States of America or in any other investments authorized by Texas law; provided that all such deposits and investments shall be made in such manner that the money required to be expended from any Fund will be available at the proper time or times. All such investments shall be valued no less frequently than the last Business Day of the City's Fiscal Year at their market value, except that any direct obligations of the United States of America - State and Local Government Series shall be continuously valued at their par value or principal face amount. For purposes of maximizing investment returns, money in such Funds may be invested, together with money in other Funds or with other money of the City, in common investments of the kind described above, or in a common pool of such investments maintained by the City which shall be kept and held at an official depository of the City, which shall not be deemed to be a loss of the segregation of such

money or Funds provided that safekeeping receipts, certificates of participation or other documents clearly evidencing the investment or investment pool in which such money is invested and the share thereof purchased with such money or owned by such Fund are held by or on behalf of each such Fund. If and to the extent necessary, such investments or participations therein shall be promptly sold to prevent any default.

(b) All interest and income derived from deposits and investments credited to the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Reserve Fund and the Operation and Maintenance Reserve Fund shall remain in such funds to the extent necessary to accumulate the Reserve Fund Requirements or other required balance therein.

(c) All interest and income derived from deposits and investments of any amounts held in any construction fund, including amounts held therein as capitalized interest, created by any Supplemental Ordinance authorizing the issuance of Airport Obligations, shall remain in such construction fund for application in the manner provided in such Supplemental Ordinance.

(d) To the extent not otherwise provided for above in this Article III (including Section 3.04) or specifically excluded from the definition of Gross Revenues, all interest and income derived from deposits and investments credited to the Revenue Fund, the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund, the Inferior Lien Bond Reserve Fund, the Operation and Maintenance Reserve Fund, the Renewal and Replacement Fund and the Airports Improvement Fund, shall be transferred or credited monthly to the Revenue Fund or to such other Funds as may be required under federal tax law.

(e) Notwithstanding anything to the contrary contained herein, any interest and income derived from deposits and investments of any amounts credited to any fund or account may be paid to the federal government if, in the opinion of nationally recognized bond counsel, such payment is required in order to prevent interest on any Airport Obligations from being includable within the gross income of the owners thereof for federal income tax purposes, if such Airport Obligations were issued on a tax-exempt basis.

**SECTION 3.17 SECURITY FOR UNINVESTED FUNDS.** So long as any Airport Obligations remain Outstanding, all uninvested moneys on deposit in, or credited to, the Revenue Fund, the Senior Lien Bond Interest and Sinking Fund, the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Interest and Sinking Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Interest and Sinking Fund and the Inferior Lien Bond Reserve Fund shall be secured by the pledge of security, as provided by law for cities in the State of Texas.

**SECTION 3.18 DETERMINATION OF RESERVE FUND PARTICIPANTS.** The determination of whether any series of Airport Obligations issued pursuant to the terms of this Master Ordinance shall be Reserve Fund Participants shall be made in the related Supplemental Ordinance or, as the case may be, the applicable officers pricing certificate.

## ARTICLE IV

### PFC REVENUES

**SECTION 4.01 PURPOSE.** The City hereby reserves the right to commit, pledge, encumber or otherwise use all or any portion of PFC Revenues solely for the purposes of the Airport System, including, but not limited to: (a) committing all or any portion of PFC Revenues to the payment of debt service for any Airport Obligations; (b) pledging all or any portion of PFC Revenues to the payment of certain obligations secured by a pledge of all or a designated portion of PFC Revenues; or (c) using all or any portion of PFC Revenues for payment of certain projects of the Airport System or other purposes that benefit the Airport System.

**SECTION 4.02 PFC ORDINANCE; COMMITTING OR PLEDGING PFC REVENUES.** Prior to committing or pledging PFC Revenues under subparagraphs 4.01(a) and (b) above, the City shall adopt one or more ordinances (which may be in the form of a Supplemental Ordinance to the Master Ordinance, a separate ordinance or a combination of both) to determine, as appropriate, (i) the eligible PFC Revenues available for such purpose and the

manner by which such available PFC Revenues may be committed or pledged for the purposes described in such subparagraphs; (ii) the disposition of available PFC Revenues during a given Fiscal Year(s); (iii) the flow of funds of such PFC Revenues for the purposes described such subparagraphs; and (iv) any determinations, findings, appropriations, reservations, and covenants that are appropriate and necessary to give effect to such ordinance. Any such ordinances shall be accompanied by an opinion of bond counsel to the Airport System to the effect that the ordinance is not in conflict with any provisions or covenants of this Master Ordinance or any other ordinance authorizing the issuance of Airport Obligations.

## ARTICLE V

### ADDITIONAL BONDS

#### SECTION 5.01 SENIOR LIEN OBLIGATIONS AND SUBORDINATE LIEN BONDS.

(a) The City reserves the right to issue, for any lawful Airport System purpose, one or more installments of Additional Senior Lien Obligations and Additional Subordinate Lien Bonds; provided, however, that no such Additional Senior Lien Obligations or Additional Subordinate Lien Bonds shall be issued unless:

(i) No Default. The Mayor and the Aviation Director certify that, upon the issuance of such series of Bonds, the City will not be in default under any term or provision of any Bonds then Outstanding or any ordinance pursuant to which any of such Bonds were issued;

(ii) Proper Fund Balances. The City Controller shall certify that, upon the issuance of such series of Bonds, the Senior Lien Bond Interest and Sinking Fund and the Subordinate Lien Bond Interest and Sinking Fund will have the required amounts on deposit therein and that the Senior Lien Bond Reserve Fund and the Subordinate Lien Bond Reserve Fund will contain the applicable Reserve Fund Requirement or so much thereof as is required to be funded at such time;

(iii) Historical Coverage on Outstanding Bonds. The City Controller shall certify that, for either the City's most recent complete Fiscal Year or for any consecutive 12 out of the most recent 18 months, the Net Revenues were equal to at least:

(A) 125% of the Debt Service Requirements on all Senior Lien Obligations for such period, plus

(B) 110% of the Debt Service Requirements on all Subordinate Lien Bonds for such period;

(iv) Projected Coverage for Additional Bonds. An Airport Management Consultant provides a written report setting forth projections which indicate that the estimated Net Revenues for each of the three consecutive Fiscal Years beginning in the earlier of:

(A) the first Fiscal Year following the estimated date of completion and initial use of all revenue-producing facilities to be financed with such series of Bonds, based upon a certified written estimated completion date by the consulting engineer for such facility or facilities, or

(B) the first Fiscal Year in which the City will have scheduled payments of interest on or principal of the series of Bonds to be issued for the payment of which provision has not been made as indicated in the report of such Airport Management Consultant from proceeds of such series of Bonds, investment income thereon or from other appropriated sources (other than Net Revenues),

are equal to at least:

(1) 125% of the Debt Service Requirements on all Senior Lien Obligations, plus

- (2) 110% of the Debt Service Requirements on all Subordinate Lien Bonds,

scheduled to occur during each such respective Fiscal Year after taking into consideration the additional Debt Service Requirements for the additional series of Bonds to be issued;

(v) Alternate Coverage for Additional Bonds. In lieu of the certification described in (iv) above, the City Controller may provide a certificate showing that, for either the City's most recent complete Fiscal Year or for any consecutive 12 out of the most recent 18 months, the Net Revenues were equal to at least:

(A) 125% of the maximum Debt Service Requirements on all Senior Lien Obligations,  
plus

(B) 110% of the maximum Debt Service Requirements on all Subordinate Lien Bonds

scheduled to occur in the then current or any future Fiscal Year after taking into consideration the issuance of the series of Bonds proposed to be issued;

(vi) Refunding Bonds. If Bonds are being issued for the purpose of refunding less than all previously issued Bonds which are then Outstanding, none of the certifications described in (iii), (iv) or (v) above are required (except in the event Senior Lien Obligations are issued to refund Subordinate Lien Bonds) so long as the Debt Service Requirements in any Fiscal Year after the issuance of such Bonds will not exceed the scheduled Debt Service Requirements in the same Fiscal Year prior to the issuance of such Bonds; and

(vii) Supplemental Ordinance Requirements. Provision is made in the Supplemental Ordinance authorizing the series of Bonds proposed to be issued for:

(A) additional payments into the Senior Lien Bond Interest and Sinking Fund or the Subordinate Lien Bond Interest and Sinking Fund (as the case may be) sufficient to provide for any principal and interest requirements resulting from the issuance of the Bonds including, in the event that interest on the additional series of Bonds is capitalized and/or to be paid from investment earnings, a requirement for the transfer from the capitalized interest fund or account and/or from the construction fund to the Senior Lien Bond Interest and Sinking Fund or the Subordinate Lien Bond Interest and Sinking Fund (as the case may be) of amounts fully sufficient to pay interest on such series of Bonds during the period specified in the ordinance; and

(B) satisfaction of the Reserve Fund Requirement by not later than the date required by this Master Ordinance or any Supplemental Ordinance authorizing any Additional Senior Lien Obligations or Additional Subordinate Lien Bonds, as applicable.

(b) Special Provisions for Refunding Short Term/Demand Obligations. The provisions of paragraphs (iv), (v) and (vi) above shall not apply to the issuance of Additional Senior Lien Obligations or Additional Subordinate Lien Bonds for the purpose of refunding Short Term/Demand Obligations.

(c) Special Provisions for Completion Bonds. The provisions of paragraphs (iii), (iv) and (v) above shall not apply to the issuance of Completion Bonds in accordance with Section 5.03 hereof.

(d) Special Provisions for Credit Agreements. The City may enter into Credit Agreements with respect to any Bonds or Qualified Hedge Agreements if:

(i) prior to entering into such Credit Agreement, the City, to the extent required by law, shall cause the proceedings authorizing the Credit Agreement and any contracts or reimbursement agreements relating thereto to be submitted to and approved by the Attorney General of Texas;

(ii) for any Credit Agreement that obligates the City to make any future payments for the availability of such Credit Agreement, the City's financial advisor must certify that the inclusion of such payments within the Debt Service Requirements on the Bonds or Qualified Hedge Agreement to which the Credit Agreement relates will not cause such Bonds or Qualified Hedge Agreement to fail to comply with the applicable coverage requirements for their issuance or incurrence; and

(iii) to the extent that Bonds are issued with a credit facility or a liquidity facility, the City authorizes the inclusion of additional provisions in a Supplemental Ordinance, as needed, to provide security for the payment of the principal and interest when due on Credit Agreement Obligations.

The issuer of any Credit Agreement shall be entitled to be subrogated to the rights of the Owners of the Bonds or the counterparty to the Qualified Hedge Agreement secured by such Credit Agreement, and the City's reimbursement and repayment obligations to the issuer of the Credit Agreement shall be secured by Net Revenues as herein provided.

(e) Special Provisions for Qualified Hedge Agreements. The City may enter into Qualified Hedge Agreements contemporaneously with or following the issuance of any Bonds or in conjunction with the payment, sale, resale or exchange of any Bonds for any purpose authorized by law if the following requirements are satisfied:

(i) the proceedings authorizing the Qualified Hedge Agreement and any contracts or reimbursement agreements relating thereto shall, to the extent required by law, be submitted to and approved by the Attorney General of Texas;

(ii) the City shall have received written confirmations from each rating agency then rating the Bonds that entering into such Qualified Hedge Agreement will not, in and of itself, result in a withdrawal or reduction of any rating assigned to the Bonds; and

(iii) the City's financial advisor shall certify that the Bonds to which the Qualified Hedge Agreement relates could have been issued in satisfaction of all of the coverage requirements of this Article V if the Debt Service Requirements with respect to such Bonds are recalculated (as provided in the definition of Debt Service Requirements) to take into account payments due under the Qualified Hedge Agreement.

**SECTION 5.02 SHORT TERM/DEMAND OBLIGATIONS.** The City reserves the right to issue, from time to time, one or more series of Additional Senior Lien Obligations and/or Additional Subordinate Lien Bonds as "Short Term/Demand Obligations" provided that the aggregate principal amount of Short Term/Demand Obligations Outstanding at any time may not exceed the greater of \$150,000,000 or 30% of the aggregate principal amount of Bonds Outstanding at the time of issuance of the last series of Short Term/Demand Obligations; provided, however, that no such Short Term/Demand Obligations may be issued without satisfying the applicable provisions of Section 5.01 above; provided further, however, that no Short Term/Demand Obligation shall be subject to the limitations as to maximum principal amount as set forth above during any period of time that the City's financial advisor certifies that the City's variable or adjustable interest rate exposure under such Short Term/Demand Obligation is substantially hedged pursuant to an interest rate swap, interest rate cap or other interest rate hedging mechanism with a counterparty having a rating in one of the two highest credit rating categories by at least two major rating agencies (or with a counterparty whose payment obligations under such interest rate swap, interest rate cap or other interest rate hedging mechanism are insured or guaranteed by an entity having such rating) pursuant to which the maximum net rate of interest that the City is obligated to pay (after taking into account all payments to be made by such counterparty) does not exceed the interest rate certified with respect to such Short Term/Demand Obligation by such financial advisor pursuant to paragraph (ii) clause (2) of the definition of Debt Service Requirements.

**SECTION 5.03 COMPLETION BONDS.**

(a) The City reserves the right to issue one or more series of either: (i) Additional Senior Lien Obligations to pay the cost of completing any Airport Project (as defined in this Section below) for which Senior Lien Obligations have previously been issued or (ii) Additional Subordinate Lien Bonds to pay the cost of completing any Airport Project for which Subordinate Lien Bonds have previously been issued.

(b) Prior to the issuance of any series of Completion Bonds the City must provide, in addition to all of the applicable certificates required by Section 5.01, the following documents:

(i) a certificate of the consulting engineer engaged by the City to design the Airport Project for which the Completion Bonds are to be issued stating that such Airport Project has not materially changed in scope since the issuance of the most recent series of Bonds for such purpose (except as permitted in the applicable ordinance authorizing such Bonds) and setting forth the aggregate cost of the Airport Project which, in the opinion of such consulting engineer, has been or will be incurred; and

(ii) a certificate of the Aviation Director (i) stating that all amounts allocated to pay costs of the Airport Project from the proceeds of the most recent series of Bonds issued in connection with the Airport Project for which the Completion Bonds are being issued were used or are still available to be used to pay costs of such Airport Project; (ii) containing a calculation of the amount by which the aggregate cost of that Airport Project (furnished in the consulting engineer's certificate described above) exceeds the sum of the costs of the Airport Project paid to such date plus the moneys available at such date within any construction fund established therefor or other like account applicable to the Airport Project plus any other moneys which the Aviation Director, in his discretion, has determined are available to pay such costs in any other fund; and

(iii) certifying that, in the opinion of the Aviation Director, the issuance of the Completion Bonds is necessary to provide funds for the completion of the Airport Project.

(c) For purposes of this Section, the term "Airport Project" shall mean any Airport System facility or project which shall be defined as an Airport Project in any Supplemental Ordinance authorizing the issuance of Additional Senior Lien Obligations or Additional Subordinate Lien Bonds for the purpose of financing such Airport Project. Any such Supplemental Ordinance may contain such further provisions as the City shall deem appropriate with regard to the use, completion, modification or abandonment of such Airport Project.

**SECTION 5.04 INFERIOR LIEN OBLIGATIONS.** The City reserves the right to issue or incur, for any lawful Airport System purpose, bonds, notes or other obligations secured in whole or in part by liens on the Net Revenues that are junior and subordinate to the lien on Net Revenues securing payment of the Senior Lien Obligations and Subordinate Lien Bonds. Such Inferior Lien Bonds may be further secured by any other source of payment lawfully available for such purposes.

**SECTION 5.05 SPECIAL FACILITIES BONDS.** The City reserves the right to issue, from time to time, in one or more series, Special Facilities Bonds as herein provided to finance and refinance the cost of any Special Facilities, including all reserves required therefor, all related costs of issuance and other amounts reasonably relating thereto, provided that such Special Facilities Bonds shall be payable solely from payments by Special Facilities lessees and/or other security not provided by the City. In no event shall any Gross Revenues or any other amounts held in any other fund or account maintained by the City as security for the Bonds or for the construction, operation, maintenance or repair of the Airport System be pledged to the payment of Special Facilities Bonds or to the payment of any expenses of maintenance and operation of Special Facilities.

**SECTION 5.06 PFC OBLIGATIONS.** The City reserves the right to issue or incur, for any lawful Airport System purpose, bonds, notes or other obligations secured in whole or in part by a lien on all or any designated portion of the PFC Revenues. Such PFC obligations may be further secured by any other source of payment lawfully available for such purposes.

**SECTION 5.07 EXCLUDED FEE AND CHARGE REVENUES OBLIGATIONS.** The City reserves the right to issue or incur, for any lawful Airport System purpose, bonds, notes or other obligations secured in whole or in part by a lien on all or any designated portion of Excluded Fee and Charge Revenues. Such obligations may be further secured by any other source of payment lawfully available for such purposes.

## ARTICLE VI

### COVENANTS AND PROVISIONS RELATING TO ALL BONDS

**SECTION 6.01 PUNCTUAL PAYMENT OF OBLIGATIONS.** The City will punctually pay or cause to be paid the interest on and principal of all Airport Obligations according to the terms thereof and will faithfully do and perform, and at all times fully observe, any and all covenants, undertakings, stipulations and provisions contained in this Master Ordinance and in any Supplemental Ordinance.

**SECTION 6.02 MAINTENANCE OF AIRPORT SYSTEM.** The City covenants that it will at all times maintain and operate the Airport System, or, within the limits of its authority, cause the same to be maintained and operated, in good and serviceable condition.

**SECTION 6.03 LIMITATION ON CITY CHARGES FOR OPERATION AND MAINTENANCE EXPENSES.** The City covenants that it will not charge the Airport System any amounts for overhead expenses relating to the administration, operation and maintenance of the Airport System except to the extent that such amounts are reasonably allocable to the Airport System based upon a stated policy of allocation, reasonably applied to the Airport System and all other departments of the City and further covenants that the City will not charge the Airport System for any property provided or services rendered by the City unless such services are reasonably necessary and required for the Airport System and are not otherwise provided to the Airport System. All such charges imposed by the City upon the Airport System shall be reasonable, fair and consistent with similar charges imposed upon other departments of the City and shall be consistent with all applicable federal laws, regulations and other requirements applicable to the Airport System or imposed upon the Airport System in connection with the acceptance by the Airport System of any federal grants or aid.

**SECTION 6.04 SALE OR ENCUMBRANCE OF AIRPORT SYSTEM.**

(a) Except for the use of the Airport System or services pertaining thereto in the normal course of business, neither all nor a substantial part of the Airport System shall be sold, leased, mortgaged, pledged, encumbered, alienated, or otherwise disposed of until all Airport Obligations have been paid in full, or unless provision has been made therefor, and the City shall not dispose of its title to the Airport System or to any useful part thereof, including, without limitation, any property necessary to the operation and use of the Airport System, (i) except for the execution of leases, licenses, easements, or other agreements in connection with the operation of the Airport System by the City, or in connection with any Special Facilities, (ii) except for any pledges of and liens on revenues derived from the operation and use of the Airport System, or any part thereof, or any Special Facilities pertaining thereto, for the payment of Airport Obligations, Special Facilities Bonds and any other obligations pertaining to the Airport System, and (iii) except as otherwise provided in the next two paragraphs.

(b) The City may sell, exchange, lease, or otherwise dispose of, or exclude from the Airport System, any property constituting a part of the Airport System which the Aviation Director certifies (i) to be no longer useful in the construction or operation of the Airport System, or (ii) to be no longer necessary for the efficient operation of the Airport System, or (iii) to have been replaced by other property of at least equal value. The net proceeds of the sale or disposition of any Airport System property (or the fair market value of any property so excluded) pursuant to this paragraph shall be used for the purpose of replacing properties at the Airport System, or shall be paid into the Airports Improvement Fund for the purposes thereof.

(c) Nothing herein shall prevent any transfer of all or a substantial part of the Airport System to another body corporate or politic (including, but not necessarily limited to a joint action agency or an airport authority) which assumes the City's obligations under this Master Ordinance and any Supplemental Ordinance, wholly or in part, if, in the written opinion of the Airport Management Consultant, the ability to meet the rate covenant and other covenants under this Master Ordinance and any Supplemental Ordinance are not materially and adversely affected. In the event of any such transfer and assumption, nothing herein shall prevent the retention by the City of any facility of the Airport System if, in the written opinion of the Airport Management Consultant, such retention will not materially and adversely affect nor unreasonably restrict such other body's ability to comply with the requirements of the rate covenant and the other covenants of this Master Ordinance and any Supplemental Ordinance.

**SECTION 6.05 INSURANCE.** The City further covenants and agrees that it will keep the Airport System insured with insurers of good standing against risks, accidents or casualties against which and to the extent customarily insured against by political subdivisions of the State of Texas operating similar properties, to the extent that such insurance is available. All net proceeds of such insurance shall be applied to repair or replace the insured property



that is damaged or destroyed or to make other capital improvements to the Airport System or to redeem Airport Obligations except for proceeds of business interruption insurance, which shall be credited to the Revenue Fund.

**SECTION 6.06 ACCOUNTS, RECORDS, AND AUDITS.** The City covenants and agrees that it will maintain a proper and complete system of records and accounts pertaining to the Gross Revenues and the operation of the Airport System in which full, true and proper entries will be made of all dealings, transactions, business and affairs that in any way affect or pertain to the Gross Revenues and the Airport System. The City shall, within 120 days after the close of each of its Fiscal Years or as soon thereafter as practicable, cause an audit report of such records and accounts to be prepared by an independent certified public accountant or independent firm of certified public accountants, which shall calculate the Gross Revenues, Net Revenues and Debt Service Requirements for such Fiscal Year and shall set forth a calculation to demonstrate whether the City has satisfied the rate covenant contained in Section 3.03 hereof. In addition, the City shall each year, as a part of its annual audit, cause an independent certified public accountant or independent firm of certified public accountants to prepare a report containing an analysis of any overhead and direct charges imposed on the Airport System by the City to determine whether such charges were imposed in conformity with the covenant contained in Section 6.03 hereof. Each year promptly after such reports are prepared, the City shall furnish copies thereof to any Owners of Airport Obligations who shall request the same. All expenses of obtaining such reports shall constitute Operation and Maintenance Expenses of the Airport System.

**SECTION 6.07 PLEDGE AND ENCUMBRANCE OF REVENUES.** The City covenants and represents that it has the lawful power to create a lien on and to pledge the Net Revenues to secure the payment of the Airport Obligations and has lawfully exercised such power under the Constitution and laws of the State of Texas. The City further covenants and represents that, other than to the payment of Operation and Maintenance Expenses and the Airport Obligations, the Gross Revenues are not and will not be made subject to any other lien, pledge or encumbrance to secure the payment of any debt or obligation of the City, unless such lien, pledge or encumbrance is junior and subordinate to the lien and pledge securing payment of the Airport Obligations.

**SECTION 6.08 BONDHOLDERS REMEDIES.** This Master Ordinance and all Supplemental Ordinances shall constitute a contract between the City and the Owners of the Airport Obligations from time to time Outstanding and this Master Ordinance and all Supplemental Ordinances shall be and remain irrevocable until the Airport Obligations authorized thereby and the interest thereon shall be fully paid or discharged or provision therefor shall have been made as provided herein. In the event of a default in the payment of the principal of or interest on any of the Airport Obligations or a default in the performance of any duty or covenant provided by law or in this Master Ordinance or any Supplemental Ordinance, the Owner or Owners of any of the Airport Obligations authorized thereby may pursue all legal remedies afforded by the Constitution and laws of the State of Texas to compel the City to remedy such default and to prevent further default or defaults. Without in any way limiting the generality of the foregoing, it is expressly provided that any Owner of any of the Airport Obligations may at law or in equity, by suit, action, mandamus, or other proceedings, enforce and compel performance of all duties required to be performed by the City under this Master Ordinance and any Supplemental Ordinance, including the making and setting of reasonably required rates and charges for the use and services of the Airport System, the deposit of the Gross Revenues thereof into the special Funds herein provided, and the application of such Gross Revenues in the manner required in this Master Ordinance and any Supplemental Ordinance.

**SECTION 6.09 LEGAL HOLIDAYS.** In any case where the date of maturity of interest on or principal of any series of Airport Obligations or the date fixed for redemption of any series of Airport Obligations shall be in the City a legal holiday or a day on which a Paying Agent/Registrar for such Airport Obligations is authorized by law to close, then payment of interest or principal need not be made on such date but may be made on the next succeeding day not in the City a legal holiday or a day on which such Paying Agent/Registrar is authorized by law to close with the same force and effect as if made on the date of maturity or the date fixed for redemption and no interest shall accrue for the period from the date of maturity or redemption to the date of actual payment.

## ARTICLE VII

### ALTERATION OF RIGHTS AND DUTIES; AMENDMENT OF ORDINANCE

**SECTION 7.01 ALTERATION OF RIGHTS AND DUTIES.** The rights, duties, and obligations of the City and the Owners of the Airport Obligations are subject in all respects to all applicable federal and state laws

including, without limitation, the provisions of federal law regarding the composition of indebtedness of political subdivisions, as the same now exist or may hereafter be amended. Inconsistencies among the provisions of the ordinances authorizing the issuance of Airport Obligations shall be resolved by the City in any manner or by any action to conform such provisions as it deems necessary or advisable in accordance with applicable law. The City may consult with and rely on the opinion of nationally recognized bond counsel with regard to any or all matters in this Article VII.

**SECTION 7.02 AMENDMENT WITHOUT CONSENT.** The City may, without the consent of or notice to any of the Owners of the Airport Obligations, amend this Master Ordinance or any Supplemental Ordinance for any one or more of the following purposes:

(a) To cure any ambiguity, defect, omission or inconsistent provision in this Master Ordinance, any Supplemental Ordinance, or in the Airport Obligations; or to comply with any applicable provision of state or federal law or regulation of federal agencies; provided, however, that such action shall not adversely affect the interests of the Owners of the Airport Obligations;

(b) To change the terms or provisions of this Master Ordinance or any Supplemental Ordinance to the extent necessary to prevent the interest on the Airport Obligations from being includable within the gross income of the Owners thereof for federal income tax purposes;

(c) To grant to or confer upon the Owners of the Airport Obligations any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon the Owners of the Airport Obligations;

(d) To add to the covenants and agreements of the City contained in this Master Ordinance or any Supplemental Ordinance other covenants and agreements of, or conditions or restrictions upon, the City, or to surrender or eliminate any right or power reserved to or conferred upon the City in this Master Ordinance or any Supplemental Ordinance;

(e) To subject to the lien and pledge of this Master Ordinance or any Supplemental Ordinance additional Net Revenues which may include revenues, properties or other collateral;

(f) To add requirements or incorporate modifications the compliance with which is required by a rating agency in connection with issuing or confirming a rating with respect to any series of Airport Obligations;

(g) To authorize any series of Additional Senior Lien Bonds, Additional Senior Lien Notes, Additional Subordinate Lien Bonds or additional Inferior Lien Bonds, and, in connection therewith: (i) to specify and determine the terms, forms and details thereof and (ii) to create such additional funds and accounts and to effect such amendments of this Master Ordinance which may be necessary for such issuance, provided in each case that no such amendment or supplement shall be contrary to or inconsistent with the limitations set forth in this Master Ordinance;

(h) To evidence any sale, transfer or encumbrance of the Airport System in accordance with the provisions of Section 6.04;

(i) To make any other modification, amendment or supplement that shall not materially adversely affect the interests of the Owners of the Airport Obligations;

(j) To cure or correct any technical defect in connection with the terms, conditions or procedures relating to the variable rate provisions contained in any Supplemental Ordinance; provided, however, that such action shall not adversely affect the interests of the owners of the Airport Obligations; and

(k) Prior to the conversion of any variable rate Airport Obligations to a different interest rate mode, to change the terms, conditions or procedures relating to the new interest rate mode.

**SECTION 7.03 AMENDMENTS REQUIRING CONSENT.** The City may at any time adopt one or more ordinances (which may be in the form of a Supplemental Ordinance) amending, modifying, adding to or eliminating

any of the provisions of this Master Ordinance or any Supplemental Ordinance, but, if such amendment is not of the character described in Section 7.02 hereof, only with the consent given in accordance with Section 7.04 hereof of the Owner or Owners of not less than a majority in aggregate unpaid principal amount of the Airport Obligations then Outstanding and affected by such amendment, modification, addition, or elimination; provided, however, that nothing in this Section 7.03 shall permit (a) an extension of the maturity of the principal of or interest on any Airport Obligation issued hereunder, or (b) a reduction in the principal amount of any Airport Obligation or the rate of interest on any Airport Obligation, or (c) a privilege or priority of (i) any Senior Lien Obligation(s) over any other Senior Lien Obligation(s), (ii) any Subordinate Lien Bond(s) over any other Subordinate Lien Bond(s), or (iii) any Inferior Lien Bond(s) over any other Inferior Lien Bond(s), or (d) a reduction in the aggregate principal amount of the Airport Obligations required for consent to such amendment, unless the Owner or Owners of 100% in aggregate principal amount of the Airport Obligations shall consent to any of said changes. Before the City shall adopt one or more of such ordinances pursuant to this Section 7.03, the City must receive an opinion from nationally recognized bond counsel to the effect that such ordinance or ordinances does not adversely affect the exclusion from gross income for federal income tax purposes of interest on the Airport Obligations.

#### SECTION 7.04 CONSENT OF OWNERS.

(a) Any consent required by Section 7.03 hereof by any Owner of Airport Obligations shall be in writing, may be in any number of concurrent writings of similar tenor, and may be signed by such Owner or his duly authorized attorney. Proof of the execution of any such consent or of the writing appointing any such attorney and of the ownership Airport Obligations, if made in the following manner, shall be sufficient for any of the purposes of this Master Ordinance, and shall be conclusive in favor of the City with regard to any action taken, suffered or omitted to be taken by the City under such instrument, namely:

(i) The fact and date of the execution by any person of any such writing may be proved by the certificate of any officer in any jurisdiction who by law has power to take acknowledgments within such jurisdiction that the person signing such writing acknowledged before him the execution thereof, or by affidavit of any witness to such execution; and

(ii) The fact of the ownership by any person of any Airport Obligations and the date of the ownership of same may be proved by a certificate executed by an appropriate officer of the Paying Agent/Registrar for such Airport Obligations, stating that at the date thereof such Airport Obligations were registered in the name of such party in the register for such Airport Obligations.

In lieu of the foregoing the City may accept such other proofs of the foregoing as it shall deem appropriate.

(b) Consents required pursuant to Section 7.03 shall be valid only if given following the giving of notice by or on behalf of the City requesting such consent and setting forth the substance of the proposed amendment of this Master Ordinance or any Supplemental Ordinance in respect of which such consent is sought and stating that copies thereof are available at the office of the City Secretary for inspection. Such notice shall be given by certified mail, postage prepaid, to each Registered Owner of the Airport Obligations affected at the address shown on the register for such Airport Obligations.

SECTION 7.05 REVOCATION OF CONSENT. Any consent by any Owner of an Airport Obligation pursuant to the provisions of this Article shall be irrevocable for a period of six months from the date of mailing of the notice provided for in this Article, and shall be conclusive and binding upon all future Owners of the same Airport Obligation and any Airport Obligation delivered in transfer thereof or in exchange for or replacement thereof during such period. Such consent may be revoked at any time after six months from the date of the first mailing of such notice by the Owner who gave such consent or by a successor in title, by filing notice thereof with the Paying Agent/Registrar for such Airport Obligation, but such revocation shall not be effective if the Owners of a majority in aggregate principal amount of the Airport Obligations then Outstanding and affected thereby have, prior to the attempted revocation, consented to and approved the amendment.

SECTION 7.06 BOND INSURER MAY BE DEEMED OWNER. For purposes of giving any consent under this Article VII, the bond insurer of any series of Airport Obligations may be deemed by the City to be the

Owner of such series of Airport Obligations, as provided in the related Supplemental Ordinance or officers pricing certificate.

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**APPENDIX B-2**

**PROPOSED AMENDMENTS TO THE MASTER ORDINANCE**

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## APPENDIX B-2

### PROPOSED AMENDMENTS TO THE MASTER ORDINANCE

#### Proposed 2016 Amendments

The following amendments to the Master Ordinance have been incorporated into the Series 2020 Bonds, but will not become effective until the Proposed 2016 Amendments (or portions thereof) have become incorporated or deemed incorporated into every ordinance pursuant to which Airport Obligations are then Outstanding (the "Amendment Effective Date"). The City may not exercise its rights under any portion of the Proposed 2016 Amendments until the Amendment Effective Date.

As of the date of this Official Statement, the Proposed 2016 Amendments have been incorporated into the (1) City of Houston, Texas Airport System Senior Lien Commercial Paper Notes, Series A and Series B; (2) City of Houston, Texas Airport Subordinate Lien Revenue and Refunding Bonds, Series 2018A (AMT) and Series 2018B (Non-AMT), (3) City of Houston, Texas Airport Subordinate Lien Revenue Refunding Bonds, Series 2018C (AMT) and Series 2018D (Non-AMT), and (4) Series 2020 Bonds.

1. Section 5.02 of the Master Ordinance shall read:

SECTION 5.02                      SHORT TERM/DEMAND OBLIGATIONS.    The City reserves the right to issue, from time to time, one or more series of Additional Senior Lien Obligations and/or Additional Subordinate Lien Bonds as "Short Term/Demand Obligations"; provided, however, that no such Short Term/Demand Obligations may be issued without satisfying the applicable provisions of Section 5.01 above.

2. The definition of "Gross Revenues" shall read as follows, and the definition of "Released Revenues" shall be added.

**"Gross Revenues"** means all income and revenues derived directly or indirectly by the City from the operation and use of and otherwise pertaining to the Airport System, or any part thereof, whether resulting from extensions, enlargements, repairs, betterments or other improvements to the Airport System, or otherwise, and includes, except to the extent hereinafter expressly excluded, all revenues received by the City from the Airport System, including, without limitation, all rentals, rates, fees and other charges for the use of the Airport System, or for any service rendered by the City in the operation thereof, interest and other income realized from the investment or deposit of amounts credited to any fund required to be maintained pursuant to this Master Ordinance or any other ordinance authorizing the issuance of Airport Obligations. Gross Revenues expressly exclude:

- (i)            proceeds of any Airport Obligations;
- (ii)          interest or other investment income derived from Airport Obligation proceeds deposited to the credit of any construction fund, or applied to fund capitalized interest, or interest or investment income required to be retained in the Senior Lien Bond Reserve Fund, the Subordinate Lien Bond Reserve Fund, the Inferior Lien Bond Reserve Fund, the Operation and Maintenance Reserve Fund or any escrow fund in order to accumulate therein any amount or balance required to be accumulated or maintained therein pursuant to any ordinance authorizing any series of Airport Obligations;
- (iii)        any monies received as grants, appropriations, or gifts, the use of which is limited by the grantor or donor to the construction or acquisition of Airport System facilities, except to the extent any such monies shall be received as payments for the use of the Airport System facilities;

- (iv) any revenues derived from any Special Facilities which are pledged to the payment of Special Facilities Bonds;
- (v) insurance proceeds other than loss of use or business interruption insurance proceeds;
- (vi) the proceeds of any passenger facility charge or other per-passenger charge as may be hereafter authorized under federal law, including, but not limited to, those revenues defined as PFC Revenues;
- (vii) sales and other taxes collected by the Airport System on behalf of the State of Texas and any other taxing entities;
- (viii) Federal Payments received by the Airport System unless the City first receives an opinion from nationally recognized bond counsel to the effect that such payments, if included in Gross Revenues, would not cause the interest on the Airport Obligations to be includable within the gross income of the Owners thereof for federal income tax purposes;
- (ix) the net proceeds received by the City from the disposition of any Airport System property;
- (x) any Excluded Fee and Charge Revenues;
- (xi) any Taxable Bond Credit Revenues; and
- (xii) any Released Revenues

“**Released Revenues**” means a specific, identifiable portion of the income and revenues otherwise constituting Gross Revenues (the “Identified Revenues”) with respect to which the City has adopted a Supplemental Ordinance authorizing the Identified Revenues to be excluded from the definition of Gross Revenues and finding and determining that the following conditions have been met:

- (i) either (x) the City Controller of the City has certified that, after the Identified Revenues were excluded from Gross Revenues, Net Revenues for each of the two most recent completed Fiscal Years were sufficient to satisfy the rate covenant set forth in Section 3.03(a) of this Master Ordinance in each of those Fiscal Years or (y) an Airport Management Consultant has certified, based upon reasonable assumptions, that after the Identified Revenues are excluded from Gross Revenues, Net Revenues for each of the following three (3) full Fiscal Years will be sufficient to enable the City to satisfy the rate covenant set forth in Section 3.03(a) of this Master Ordinance in each of those five Fiscal Years;
- (ii) the City has received an opinion of nationally recognized bond counsel to the effect that the exclusion of the Identified Revenues from the definition of Gross Revenues and from the pledge and lien of this Master Ordinance will not, in and of itself, cause the interest on any Outstanding Airport Obligations to be included in gross income for purposes of federal income tax; and
- (iii) the City has received written confirmation from each rating agency then rating the Outstanding Airport Obligations to the effect that the exclusion of the Identified Revenues from the definition of Gross Revenues and from the pledge and lien of this Master Ordinance will not cause a withdrawal or reduction in any unenhanced rating then assigned to any Outstanding Airport Obligation.



Beginning the first fully Fiscal Year following the adoption of the Supplemental Ordinance that meets the requirements set forth above, the Identified Revenues shall become “Released Revenues” and shall be excluded from the pledge and lien of this Master Ordinance. The City shall file a notice with the MSRB describing the Released Revenues and the effective date of the exclusion of the Released Revenues from the pledge and lien of this Master Ordinance.

3. Definition of “Qualified Hedge Agreement” shall read:

**“Qualified Hedge Agreement”** means any agreement between the City and a qualifying financial institution (as described in the following sentence) for the purpose of providing an interest rate swap, exchange, cap, collar, floor, forward or other hedging mechanism, arrangement or security, however denominated, expressly identified pursuant to its terms as being entered into in connection with and in order to hedge interest rate fluctuations on any portion of any Airport Obligations and in consideration for which the City may agree to pay, but solely from Net Revenues as herein provided, (i) periodic payments for the availability of such Qualified Hedge Agreement and/or (ii) net amounts as a result of fluctuation in hedged interest rates or in the value of any index of payment and/or (iii) termination charges. A Qualified Hedge Agreement may only be entered into with a financial institution that has long-term credit ratings or the obligations of which are unconditionally guaranteed by a financial institution with long-term credit ratings in one of the two highest generic rating categories by one nationally recognized rating service. Obligations of the City pursuant to a Qualified Hedge Agreement shall be included within the definition of Debt Service Requirements for the series of Airport Obligations to which the Qualified Hedge Agreement relates. Further, obligations of the City to make payments under a Qualified Hedge Agreement derived from or resulting from a fluctuation in hedged interest rates or in the value of any index of payment shall be deemed to be payments of interest on the Airport Obligations so hedged. Each Qualified Hedge Agreement shall be deemed to be a part of the Airport Obligations of the series to which it relates for the purpose of securing its payment by the pledge of Net Revenues as provided in Articles III, V and VI of this Master Ordinance. However, issuers of and counterparties to Qualified Hedge Agreements shall not be treated as Owners of Airport Obligations for purposes of any voting rights to approve amendments or direct the exercise of any remedies under this Master Ordinance.

4. Definition of “Reserve Fund Requirement” shall read:

**“Reserve Fund Requirement”** means the amount required to be maintained in the Senior Lien Bond Reserve Fund (and the accounts therein), the Subordinate Lien Bond Reserve Fund (and the accounts therein), or the Inferior Lien Bond Reserve Fund (and the accounts therein), as the case may be, as further set forth in the applicable Supplemental Ordinance and/or officers pricing certificate authorizing one or more series of Airport Obligations. Upon the issuance of any series of Airport Obligations, the amount of the Reserve Fund Requirement for such Airport Obligations shall be as set forth in the related Supplemental Ordinance or officers pricing certificate.

A. For Senior Lien Notes, such amount shall be computed and recomputed upon the issuance of each series of Senior Lien Notes to be the arithmetic average of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Senior Lien Notes then Outstanding, including the series of Senior Lien Notes then being issued.

B. For Senior Lien Bonds that are Reserve Fund Participants, such amount shall be computed upon the issuance of each series of Senior Lien Bonds that are Reserve Fund Participants and on each date on which Senior Lien Bonds that are Reserve Fund Participants are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Senior Lien Bonds then Outstanding that are Reserve Fund Participants.

C. For any series of Senior Lien Bonds that are Reserve Fund Non-Participants, such amount shall be computed upon the issuance of such series of Senior Lien Bonds and on each date

on which any of such series of Senior Lien Bonds are paid at maturity or optionally or mandatorily redeemed, to be an amount, if any, as set forth and determined in the related Supplemental Ordinance.

D. For Subordinate Lien Bonds that are Reserve Fund Participants, such amount shall be computed and recomputed upon the issuance of each series of Subordinate Lien Bonds that are Reserve Fund Participants and on each date on which Subordinate Lien Bonds that are Reserve Fund Participants are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Subordinate Lien Bonds then Outstanding that are Reserve Fund Participants, including any series of Subordinate Lien Bonds then being issued that are Reserve Fund Participants.

E. For any series of Subordinate Lien Bonds that are Reserve Fund Non-Participants, such amount shall be computed upon the issuance of such series of Subordinate Lien Bonds and on each date on which any of such series of Subordinate Lien Bonds are paid at maturity or optionally or mandatorily redeemed, to be an amount, if any, as set forth and determined in the related Supplemental Ordinance.

F. For Inferior Lien Bonds that are Reserve Fund Participants, such amount shall be computed and recomputed upon the issuance of each series of Inferior Lien Bonds that are Reserve Fund Participants and on each date on which Inferior Lien Bonds that are Reserve Fund Participants are paid at maturity or optionally or mandatorily redeemed, to be the greatest amount of the Debt Service Requirements scheduled to occur in the then current and each future Fiscal Year for all Inferior Lien Bonds then Outstanding that are Reserve Fund Participants, including any series of Inferior Lien Bonds then being issued that are Reserve Fund Participants.

G. For any series of Inferior Lien Bonds that are Reserve Fund Non-Participants, such amount shall be computed upon the issuance of such series of Inferior Lien Bonds and on each date on which any of such series of Inferior Lien Bonds are paid at maturity or optionally or mandatorily redeemed, to be an amount, if any, as set forth and determined in the related Supplemental Ordinance.

5. Definition of “Short Term/Demand Obligations” shall read:

**“Short Term/Demand Obligations”** means each series of bonds, notes and other obligations, the payment of principal of which is either (i) payable on demand by or at the option of the holder at a time sooner than a date on which such principal is deemed to be payable for purposes of computing Debt Service Requirements, or (ii) scheduled to be payable within one year from the date of issuance and is contemplated to be refinanced for a specified period or term through the issuance of additional Short Term/Demand Obligations pursuant to a commercial paper or other similar financing program. The purchase price, payment or refinancing of such principal may be additionally secured by a letter of credit, line of credit, standby bond purchase agreement, bond insurance, surety bond or other credit or liquidity facility.

**APPENDIX C**  
**FORMS OF CO-BOND COUNSEL OPINIONS**  
**AND**  
**TAX COUNSEL OPINIONS**

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# BRACEWELL

[Closing Date]

We have acted as co-bond counsel for the City of Houston, Texas (the “City”) in connection with the issuance of the bonds (collectively, the “Series 2020 Bonds”) described as follows:

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020A (AMT) in the original aggregate principal amount of \$131,620,000 (“Series 2020A Bonds”);

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020B (NON-AMT) in the original aggregate principal amount of \$71,565,000 (“Series 2020B Bonds”); and

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020C (TAXABLE) in the original aggregate principal amount of \$660,490,000 (“Taxable Series 2020C Bonds”).

The Series 2020 Bonds mature, bear interest and may be transferred and exchanged as set forth in the Series 2020 Bonds, City of Houston Ordinance No. 2020-745 (the “Supplemental Ordinance”) and the officers pricing certificate executed pursuant thereto (the “Officers Pricing Certificate”). The Series 2020 Bonds are also authorized pursuant to City of Houston Ordinance No. 2016-0846 (the “Master Ordinance”). The Master Ordinance, the Supplemental Ordinance and the Officers Pricing Certificate are referred to collectively herein as the “Ordinance.” Capitalized terms used herein but not otherwise defined have the meaning assigned to them in the Ordinance.

We have acted as co-bond counsel for the sole purpose of rendering an opinion with respect to the legality and validity of the Series 2020 Bonds under the Constitution and laws of the State of Texas. We have not investigated or verified original proceedings, records, data or other material, but have relied solely upon the transcript of certified proceedings described in the following paragraph. We have not assumed any responsibility with respect to the financial condition or capabilities of the City, including the Airport System, or the reporting or disclosure thereof in connection with the offer and sale of the Series 2020 Bonds. Our role in connection with the City’s Official Statement, dated September 17, 2020, prepared for use in connection with the offer and sale of the Series 2020 Bonds has been limited as described therein.

In our capacity as co-bond counsel, we have participated in the preparation of and have examined a transcript of certified proceedings pertaining to the authorization and issuance of the Series 2020 Bonds, the bonds being refunded with a portion of the proceeds of the Series 2020B Bonds (the “2020B Refunded Bonds”), the bonds being refunded with a portion of the proceeds of the Taxable Series 2020C Bonds (the “2020C Refunded Bonds”) and the commercial paper notes being refunded with a portion of the proceeds of the Series 2020A Bonds (the “Refunded Notes”), on which we have relied in giving our opinion. The transcript contains certified copies of certain proceedings of the City Council of the City;

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the report jointly prepared by Samuel Klein and Company, Certified Public Accounts, a firm of independent certified public accountants, and Public Finance Partners LLC (the "Report") verifying (i) the sufficiency of the deposits made with the paying agent and tender agent for the 2020B Refunded Bonds to repay the principal portion of the redemption drawing on the letter of credit relating to the 2020B Refunded Bonds and (ii) the sufficiency of the deposits made with the Refunded Bonds Escrow Agent for the defeasance and redemption of the 2020C Refunded Bonds; customary certificates of officials, agents and representatives of the City, the Refunded Bonds Escrow Agent, the paying agent for the Refunded Bonds, the issuing and paying agent for the Refunded Notes, and certain other persons; and other certified showings relating to the authorization and issuance of the Series 2020 Bonds and firm banking and financial arrangements for the discharge and final payment of the Refunded Bonds and the Refunded Notes. We have also examined a specimen of the form of registered bond of each series of the Series 2020 Bonds.

Based on such examination, it is our opinion that:

1. The transcript of certified proceedings referenced above evidences complete legal authority for the issuance of the Series 2020 Bonds in full compliance with the Constitution and the laws of the State of Texas presently effective and that therefore the Series 2020 Bonds constitute legal, valid and binding special obligations of the City.
2. The Series 2020 Bonds, together with all outstanding Subordinate Lien Bonds and any additional Subordinate Lien Bonds hereafter issued, are payable from and equally and ratably secured by a lien on Net Revenues (subject to the prior and superior lien on Net Revenues securing the outstanding Senior Lien Obligations and any additional Senior Lien Obligations hereafter issued) and the Subordinate Lien Bond Interest and Sinking Fund, as provided in the Ordinance. The Series 2020 Bonds are also secured by a lien on the Subordinate Lien Bond Reserve Fund Participant Account, as provided in the Ordinance.
3. Under the terms of the Ordinance and certain certificates and letters of instruction delivered thereunder delivered thereunder, firm banking and financial arrangements have been made for the discharge and final payment of the 2020B Refunded Bonds, and therefore the 2020B Refunded Bonds are deemed to be fully paid and no longer outstanding.
4. Under the terms of the Ordinance and certain certificates and letters of instruction delivered thereunder, firm banking and financial arrangements have been made for the discharge and final payment of the 2020C Refunded Bonds pursuant to the Refunded Bonds Escrow Agreement entered into between the City and the Refunded Bonds Escrow Agent effective as of the date of delivery of the Series 2020 Bonds, and therefore the 2020C Refunded Bonds are deemed to be fully paid and no longer outstanding except for the purpose of being paid from funds provided for such purpose pursuant to the Refunded Bonds Escrow Agreement.
5. Under the terms of the Ordinance and certain certificates delivered thereunder, firm banking and financial arrangements have been made for the discharge and final payment of

[Closing Date]

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the Refunded Notes, and therefore the Refunded Notes are deemed to be fully paid and no longer outstanding.

The rights of the Owners of the Series 2020 Bonds are subject to the applicable provisions of the federal bankruptcy laws and any other similar laws affecting the rights of creditors of political subdivisions, and may be limited by general principles of equity that permit the exercise of judicial discretion. The Series 2020 Bonds are secured solely by a lien on and pledge of Net Revenues as described above and certain funds as provided in the Ordinance and do not constitute an indebtedness or general obligation of the City. Owners of the Series 2020 Bonds shall never have the right to demand payment of principal or interest out of any funds raised or to be raised by taxation.

The City has reserved the right to issue Additional Senior Lien Obligations, Subordinate Lien Bonds and Inferior Lien Bonds, subject to the restrictions contained in the Ordinance, secured by liens on the Net Revenues that are prior and superior to, on a parity with, or junior and inferior to, respectively, the lien on Net Revenues securing the Series 2020 Bonds.

Our opinions are based on existing law and our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions, and this opinion letter may not be relied upon in connection with any changes to the law or facts, or actions taken or omitted, after the date hereof.

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[Closing Date]

We have acted as co-bond counsel for the City of Houston, Texas (the “City”) in connection with the issuance of the bonds (collectively, the “Series 2020 Bonds”) described as follows:

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020A (AMT) in the original aggregate principal amount of \$131,620,000 (“Series 2020A Bonds”).

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020B (NON-AMT) in the original aggregate principal amount of \$71,565,000 (“Series 2020B Bonds”); and

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020C (TAXABLE) in the original aggregate principal amount of \$660,490,000 (“Taxable Series 2020C Bonds”).

The Series 2020 Bonds mature, bear interest and may be transferred and exchanged as set forth in the Series 2020 Bonds, City of Houston Ordinance No. 2020-745 (the “Supplemental Ordinance”) and the officers pricing certificate executed pursuant thereto (the “Officers Pricing Certificate”). The Series 2020 Bonds are also authorized pursuant to City of Houston Ordinance No. 2016-0846 (the “Master Ordinance”). The Master Ordinance, the Supplemental Ordinance and the Officers Pricing Certificate are referred to collectively herein as the “Ordinance.” Capitalized terms used herein but not otherwise defined have the meaning assigned to them in the Ordinance.

We have acted as co-bond counsel for the sole purpose of rendering an opinion with respect to the legality and validity of the Series 2020 Bonds under the Constitution and laws of the State of Texas. We have not investigated or verified original proceedings, records, data or other material, but have relied solely upon the transcript of certified proceedings described in the following paragraph. We have not assumed any responsibility with respect to the financial condition or capabilities of the City, including the Airport System, or the reporting or disclosure thereof in connection with the offer and sale of the Series 2020 Bonds. Our role in connection with the City’s Official Statement, dated September 17, 2020, prepared for use in connection with the offer and sale of the Series 2020 Bonds has been limited as described therein.

In our capacity as co-bond counsel, we have participated in the preparation of and have examined a

[\_\_\_\_\_, 2020]

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transcript of certified proceedings pertaining to the authorization and issuance of the Series 2020 Bonds, the bonds being refunded with a portion of the proceeds of the Series 2020B Bonds (the “2020B Refunded Bonds”), the bonds being refunded with a portion of the proceeds of the Taxable Series 2020C Bonds (the “2020C Refunded Bonds”) and the commercial paper notes being refunded with a portion of the proceeds of the Series 2020A Bonds (the “Refunded Notes”), on which we have relied in giving our opinion. The transcript contains certified copies of certain proceedings of the City Council of the City; the report jointly prepared by Samuel Klein and Company, Certified Public Accounts, a firm of independent certified public accountants, and Public Finance Partners LLC (the “Report”) verifying (i) the sufficiency of the deposits made with the paying agent and tender agent for the 2020B Refunded Bonds to repay the principal portion of the redemption drawing on the letter of credit relating to the 2020B Refunded Bonds and (ii) the sufficiency of the deposits made with the Refunded Bonds Escrow Agent for the defeasance and redemption of the 2020C Refunded Bonds; customary certificates of officials, agents and representatives of the City, the Refunded Bonds Escrow Agent, the paying agent for the Refunded Bonds, the issuing and paying agent for the Refunded Notes, and certain other persons; and other certified showings relating to the authorization and issuance of the Series 2020 Bonds and firm banking and financial arrangements for the discharge and final payment of the Refunded Bonds and the Refunded Notes. We have also examined a specimen of the form of registered bond of each series of the Series 2020 Bonds.

Based on such examination, it is our opinion that:

1. The transcript of certified proceedings referenced above evidences complete legal authority for the issuance of the Series 2020 Bonds in full compliance with the Constitution and the laws of the State of Texas presently effective and that therefore the Series 2020 Bonds constitute legal, valid and binding special obligations of the City.

2. The Series 2020 Bonds, together with all outstanding Subordinate Lien Bonds and any additional Subordinate Lien Bonds hereafter issued, are payable from and equally and ratably secured by a lien on Net Revenues (subject to the prior and superior lien on Net Revenues securing the outstanding Senior Lien Obligations and any additional Senior Lien Obligations hereafter issued) and the Subordinate Lien Bond Interest and Sinking Fund, as provided in the Ordinance. The Series 2020 Bonds are also secured by a lien on the Subordinate Lien Bond Reserve Fund Participant Account, as provided in the Ordinance.

3. Under the terms of the Ordinance and certain certificates and letters of instruction delivered thereunder, firm banking and financial arrangements have been made for the discharge and final payment of the 2020 Refunded Bonds, and therefore the 2020B Refunded Bonds are deemed to be fully paid and no longer outstanding.

4. Under the terms of the Ordinance and certain certificates and letters of instruction delivered thereunder, firm banking and financial arrangements have been made for the discharge and final payment of the 2020C Refunded Bonds pursuant to the Refunded Bonds Escrow Agreement entered into between the City and the Refunded Bonds Escrow Agent effective as of the date of delivery of the Series 2020 Bonds, and therefore the 2020C Refunded Bonds are deemed to be fully paid and no longer outstanding except for the purpose of being paid from funds provided for such purpose pursuant to the Refunded Bonds Escrow Agreement.

[\_\_\_\_\_, 2020]

Page 3

5. Under the terms of the Ordinance and certain certificates delivered thereunder, firm banking and financial arrangements have been made for the discharge and final payment of the Refunded Notes, and therefore the Refunded Notes are deemed to be fully paid and no longer outstanding.

The rights of the Owners of the Series 2020 Bonds are subject to the applicable provisions of the federal bankruptcy laws and any other similar laws affecting the rights of creditors of political subdivisions, and may be limited by general principles of equity that permit the exercise of judicial discretion. The Series 2020 Bonds are secured solely by a lien on and pledge of Net Revenues as described above and certain funds as provided in the Ordinance and do not constitute an indebtedness or general obligation of the City. Owners of the Series 2020 Bonds shall never have the right to demand payment of principal or interest out of any funds raised or to be raised by taxation.

The City has reserved the right to issue additional Senior Lien Obligations, additional Subordinate Lien Bonds and Inferior Lien Bonds, subject to the restrictions contained in the Ordinance, secured by liens on the Net Revenues that are prior and superior to, on a parity with, or junior and inferior to, respectively, the lien on Net Revenues securing the Series 2020 Bonds.

Our opinions are based on existing law and our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions, and this opinion letter may not be relied upon in connection with any changes to the law or facts, or actions taken or omitted, after the date hereof.

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# BRACEWELL

[Closing Date]

We have acted as special tax counsel for the City of Houston, Texas (the “City”) in connection with the issuance of the bonds (collectively, the “Series 2020 Bonds”) described as follows:

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020A (AMT) in the original aggregate principal amount of \$131,620,000 (the “Series 2020A Bonds”); and

CITY OF HOUSTON, TEXAS AIRPORT SYSTEM SUBORDINATE LIEN REVENUE REFUNDING BONDS, SERIES 2020B (NON-AMT) in the original aggregate principal amount of \$71,565,000 (the “Series 2020B Bonds”).

The Series 2020 Bonds mature, bear interest and may be transferred and exchanged as set forth in the Series 2020 Bonds, City of Houston Ordinance No. 2018-493 (the “Supplemental Ordinance”) and the officers pricing certificate executed pursuant thereto (the “Officers Pricing Certificate”). The Series 2020 Bonds are also authorized pursuant to City of Houston Ordinance No. 2016-0846 (the “Master Ordinance”). The Master Ordinance, the Supplemental Ordinance and the Officers Pricing Certificate are referred to collectively herein as the “Ordinance.” Capitalized terms used herein but not otherwise defined have the meaning assigned to them in the Ordinance.

We have acted as special tax counsel for the sole purpose of rendering an opinion with respect to the excludability of interest on the Series 2020 Bonds from gross income for federal income tax purposes. In our capacity as Special Tax Counsel, we have assumed no responsibility with respect to the financial condition or capabilities of the City, including the Airport System, or the reporting or disclosure thereof in connection with the offer and sale of the Series 2020 Bonds. Our role in connection with the City’s Official Statement, dated September 17, 2020, prepared for use in connection with the offer and sale of the Series 2020 Bonds has been limited as described therein.

We acknowledge that West & Associates L.L.P., with whom our firm serves as co-bond counsel (“Co-Bond Counsel”) with respect to the Series 2020 Bonds, is not responsible for our opinion as Special Tax Counsel. The two firms are not part of a partnership and each firm is an independent entity.

In our capacity as special tax counsel, we have participated in the preparation of and have examined a transcript of certified proceedings pertaining to the authorization and issuance of the Series 2020 Bonds, the commercial paper notes being refunded with a portion of the proceeds of the Series 2020A Bonds, and the bonds being refunded with a portion of the proceeds of the Series 2020B Bonds, on which we have relied in giving our opinion. The transcript contains certified copies of certain proceedings of the City Council of the City; the report jointly prepared by Samuel Klein and Company, Certified Public Accounts, a firm of independent certified public accountants, and Public Finance Partners LLC (the “Report”) verifying the mathematical accuracy of the computation of the yield of the Series 2020 Bonds; customary certificates of officials, agents and representatives of the City and certain other persons; and

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other certified showings relating to the authorization and issuance of the Series 2020 Bonds. We also have analyzed such laws, regulations, guidance, documents and other materials as we have deemed necessary to render the opinions herein.

In providing the opinions set forth herein, we have relied on representations and certifications of the City and other parties involved with the issuance of the Series 2020 Bonds with respect to matters solely within the knowledge of the City and such parties, which we have not independently verified. In addition, we have assumed for purposes of this opinion continuing compliance with the covenants in the Ordinance, including, but not limited to, covenants relating to the tax-exempt status of the Series 2020 Bonds. Further, we have relied on the legal opinion of Co-Bond Counsel of even date herewith regarding the legality and validity of the Series 2020 Bonds under the Constitution and laws of the State of Texas.

Based on such examination, it is our opinion that:

1. Interest on the Series 2020 Bonds is excludable from gross income for federal income tax purposes under section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except with respect to interest on any Series 2020 Bond for any period during which such Series 2020 Bond is held by a person who is a "substantial user" of the facilities financed or refinanced with the proceeds of the Series 2020 Bonds or a "related person" to such a "substantial user," each within the meaning of section 147(a) of the Code;
2. The Series 2020A Bonds are "private activity bonds" within the meaning of the Code, and, as such, interest on the Series 2020A Bonds is an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer's alternative minimum tax liability;
3. The Series 2020B Bonds are "private activity bonds" within the meaning of the Code, but pursuant to the American Recovery and Reinvestment Act of 2009, interest on the Series 2020B Bonds is not an item of tax preference that is includable in alternative minimum taxable income for purposes of determining a taxpayer's alternative minimum tax liability.

Except as stated above, we express no opinion as to the amount of interest on the Series 2020 Bonds or any federal, state or local tax consequences resulting from the receipt or accrual of interest on, or the acquisition, ownership or disposition of, the Series 2020 Bonds. This opinion is specifically limited to the laws of the United States of America. Further, in the event that the representations of the City or other parties upon which we have relied are determined to be inaccurate or incomplete or the City fails to comply with the covenants of the Ordinance, interest on the Series 2020 Bonds could become includable in gross income for federal income tax purposes from the date of the original delivery of the Series 2020 Bonds, regardless of the date on which the event causing such inclusion occurs.

Our opinions are based on existing law and our knowledge of facts as of the date hereof and may be affected by certain actions that may be taken or omitted on a later date. We assume no duty to update

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or supplement our opinions, and this opinion letter may not be relied upon in connection with any changes to the law or facts, or actions taken or omitted, after the date hereof.

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**APPENDIX D****SUMMARY OF SCHEDULES RELATED TO CONTINUING DISCLOSURE OF INFORMATION**

Schedule A	PFC Collections
Schedule 1	Passenger Statistics (including Schedule 1-A – Total Enplaned Passengers for the Houston Airport System)
Schedule 2	Airline Market Shares
Schedule 3	Total Aircraft Operations and Aircraft Landed Weight
Schedule 4	Total System Cargo Activity
Schedule 5	Selected Financial Information
Schedule 6	Summary of Certain Fees and Charges
Schedule 7	Houston Airport System Debt Service Requirements Schedule
Schedule 8	Houston Airport System Outstanding Debt
Schedule 8A	Cash and Liquidity
Schedule 9*	Actuarially Determined Contribution Amounts and Changes in Pension Plan Assets
Schedule 9A*	Municipal System Pension Plan Assets, Liabilities and Unfunded Actuarial Accrued Liability
Schedule 9B*	Police System Pension Plan Assets, Liabilities and Unfunded Actuarial Accrued Liability
Schedule 9C*	Firefighter Fund Pension Plan Assets, Liabilities and Unfunded Actuarial Accrued Liability

\* The City agrees to update Schedules 9, 9A, 9B, and 9C only to the extent that the City receives updated actuarial reports from the boards of the pension systems. While required by State law, the City is not empowered to require the boards of the pension systems to obtain updated actuarial reports. The pension systems will periodically receive additional actuarial reports with regard to the City's pension plans, to the extent required under State law or requested by the boards of the pension systems. Accordingly, updated Schedules 9, 9A, 9B, and 9C may not be available in every annual continuing disclosure filing.

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## APPENDIX E

### DEPOSITORY TRUST COMPANY

*The information in this APPENDIX E describes the securities clearance procedures of The Depository Trust Company (“DTC”) in the United States. The information in this APPENDIX concerning DTC has been obtained from sources that the City believes to be reliable, but the City takes no responsibility for the accuracy of such information.*

#### **The Depository Trust Company**

DTC will act as securities depository for the Series 2020 Bonds. The Series 2020 Bonds will be issued as fully-registered Series 2020 Bonds registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Series 2020 Bond certificate will be issued for each maturity of the Series 2020 Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC.

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

Purchases of Series 2020 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2020 Bonds on DTC’s records. The ownership interest of each actual purchaser of each Series 2020 Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2020 Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Series 2020 Bonds, except in the event that use of the book-entry system for the Series 2020 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2020 Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 2020 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2020 Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Series 2020 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series 2020 Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 2020 Bonds, such as redemptions, tenders, defaults, and proposed amendments

to the Series 2020 Bond documents. For example, Beneficial Owners of Series 2020 Bonds may wish to ascertain that the nominee holding the Series 2020 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. Subject to the provisions described in the forepart under the heading “THE SERIES 2020 BONDS – Redemption – *Optional Redemption of the Tax-Exempt Bonds*,” if less than all of the Series 2020 Bonds are being redeemed, DTC’s practice is to determine by lot the amount of the interest of each Direct Participant in such Series 2020 Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2020 Bonds unless authorized by a Direct Participant in accordance with DTC’s MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.’s consenting or voting rights to those Direct Participants to whose accounts the Series 2020 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal, redemption price and interest payments on the Series 2020 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC’s practice is to credit Direct Participants’ accounts upon DTC’s receipt of funds and corresponding detail information from the City or the Paying Agent/Registrar, on the 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 Series 2020 Bonds 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, Paying Agent/Registrar, or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, redemption price and interest on the Series 2020 Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Paying Agent/Registrar; 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 Series 2020 Bonds at any time by giving reasonable notice to the City or the Paying Agent/Registrar. Under such circumstances, in the event that a successor securities depository is not obtained, such Series 2020 Bond certificates are required to be printed and delivered. The City may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, the Series 2020 Bond certificates will be printed and delivered to DTC.

Each person for whom a Participant acquires an interest in the Series 2020 Bonds, as nominee, may desire to make arrangements with such Participant to receive a credit balance in the records of such Participant, and may desire to make arrangements with such Participant to have all notices of redemption or other communications to DTC, which may affect such persons, to be forwarded in writing by such Participant and to have notification made of all interest payments.

**NONE OF THE CITY, THE UNDERWRITERS OR THE PAYING AGENT/REGISTRAR WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO SUCH PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE SERIES 2020 BONDS.**

So long as Cede & Co. is the registered owner of the Series 2020 Bonds, as nominee for DTC, references herein to Series 2020 Bondholders or registered owners of the Series 2020 Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the Series 2020 Bonds.

When reference is made to any action which is required or permitted to be taken by the Beneficial Owners, such reference shall only relate to those permitted to act (by statute, regulation or otherwise) on behalf of such Beneficial Owners for such purposes. When notices are given, they shall be sent by the Paying Agent/Registrar to DTC only.

For every transfer and exchange of Series 2020 Bonds, the Beneficial Owner may be charged a sum sufficient to cover any tax, fee or other governmental charge that may be imposed in relation thereto.

The City, in its sole discretion and without the consent of any other person, may terminate the services of DTC with respect to the Series 2020 Bonds if the City determines that (i) DTC is unable to discharge its responsibilities with respect to the Series 2020 Bonds, or (ii) a continuation of the requirement that all of the outstanding Series 2020 Bonds be registered in the registration books kept by the Paying Agent/Registrar in the name of Cede & Co., as nominee of DTC, is not in the best interests of the Beneficial Owners.

NONE OF THE CITY, THE UNDERWRITERS OR THE PAYING AGENT/REGISTRAR WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DIRECT PARTICIPANTS, TO INDIRECT PARTICIPANTS, OR TO ANY BENEFICIAL OWNER WITH RESPECT TO: (I) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, ANY DIRECT PARTICIPANT, OR ANY INDIRECT PARTICIPANT; (II) ANY NOTICE THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE SERIES 2020 BONDS UNDER THE SIXTEENTH SUPPLEMENT; (III) THE SELECTION BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT OF ANY PERSON TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF THE SERIES 2020 BONDS; (IV) THE PAYMENT BY DTC OR ANY DIRECT PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL, REDEMPTION PRICE OR INTEREST DUE WITH RESPECT TO THE SERIES 2020 BONDS; (V) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE OWNER OF THE SERIES 2020 BONDS; OR (VI) ANY OTHER MATTER.

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**APPENDIX F****UNDERWRITER DISTRIBUTION AGREEMENTS**

MORGAN STANLEY, PARENT COMPANY OF MORGAN STANLEY & CO. LLC., AN UNDERWRITER OF THE SERIES 2020 BONDS, HAS ENTERED INTO A RETAIL DISTRIBUTION ARRANGEMENT WITH ITS AFFILIATE MORGAN STANLEY SMITH BARNEY LLC. AS PART OF THE DISTRIBUTION ARRANGEMENT, MORGAN STANLEY & CO. LLC MAY DISTRIBUTE MUNICIPAL SECURITIES TO RETAIL INVESTORS THROUGH THE FINANCIAL ADVISOR NETWORK OF MORGAN STANLEY SMITH BARNEY LLC. AS PART OF THIS ARRANGEMENT, MORGAN STANLEY & CO. LLC MAY COMPENSATE MORGAN STANLEY SMITH BARNEY LLC FOR ITS SELLING EFFORTS WITH RESPECT TO THE SERIES 2020 BONDS

BOFA SECURITIES, INC., AS AN UNDERWRITER OF THE SERIES 2020 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 SERIES 2020 BONDS.

**UBS FINANCIAL SERVICES INC. (“UBS FSI”), ONE OF THE UNDERWRITERS OF THE SERIES 2020 BONDS, HAS ENTERED INTO A DISTRIBUTION AND SERVICE AGREEMENT WITH ITS AFFILIATE UBS SECURITIES LLC (“UBS SECURITIES”) FOR THE DISTRIBUTION OF CERTAIN MUNICIPAL SECURITIES OFFERINGS, INCLUDING THE SERIES 2020 BONDS. PURSUANT TO SUCH AGREEMENT, UBS FSI WILL SHARE A PORTION OF ITS UNDERWRITING COMPENSATION WITH RESPECT TO THE SERIES 2020 BONDS WITH UBS SECURITIES. UBS FSI AND UBS SECURITIES ARE EACH SUBSIDIARIES OF UBS GROUP AG.**

STERN BROTHERS & CO., AN UNDERWRITER OF THE SERIES 2020 BONDS, HAS ENTERED INTO AGREEMENTS (THE “STERN BROTHERS AGREEMENT”) EACH WITH 280 SECURITIES LLC (“280 SECURITIES”) AND BNY MELLON CAPITAL MARKETS, LLC (“BNYMCM”) FOR THE DISTRIBUTION OF CERTAIN MUNICIPAL SECURITIES OFFERINGS AT THE ORIGINAL ISSUE PRICE. PURSUANT TO EACH STERN BROTHERS AGREEMENT, STERN BROTHERS & CO. MAY SELL THE SERIES 2020 BONDS TO EACH 280 SECURITIES AND BNYMCM AND WILL SHARE A PORTION OF ITS SELLING CONCESSION COMPENSATION WITH EACH, IF APPLICABLE.

TD SECURITIES (USA) LLC HAS ENTERED INTO A NEGOTIATED DEALER AGREEMENT (THE “TD DEALER AGREEMENT”) WITH TD AMERITRADE FOR THE RETAIL DISTRIBUTION OF CERTAIN SECURITIES OFFERINGS, INCLUDING THE SERIES 2020 BONDS AT THE ORIGINAL ISSUE PRICE. PURSUANT TO THE TD DEALER AGREEMENT, TD AMERITRADE MAY PURCHASE THE SERIES 2020 BONDS FROM TD SECURITIES (USA) LLC AT THE ORIGINAL ISSUE PRICES LESS A NEGOTIATED PORTION OF THE SELLING CONCESSION APPLICABLE TO ANY OF THE SERIES 2020 BONDS TD AMERITRADE SELLS.

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