

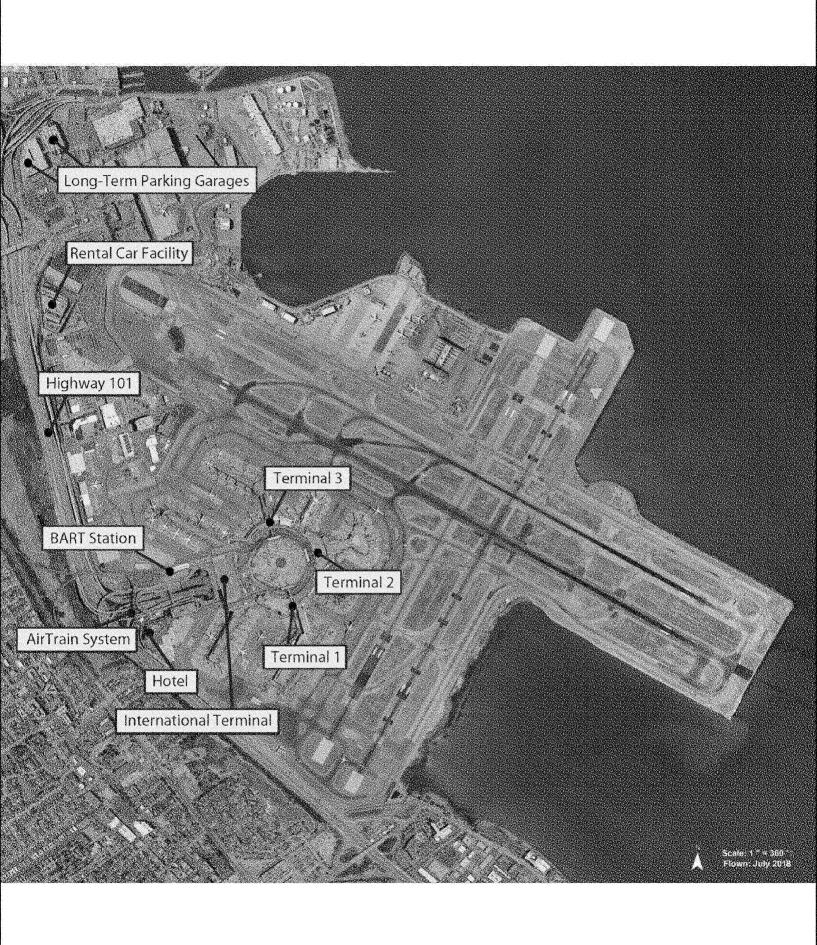
Official Statement

Airport Commission of the City and County of San Francisco San Francisco International Airport

> Second Series Revenue Bonds Series 2019E/F/G

Second Series Revenue Refunding Bonds Series 2019H





RATINGS:

Moody's: A1

S&P: A+ Fitch: A+

(See "Ratings")

In the opinion of Squire Patton Boggs (US) LLP and Amira Jackmon, Attorney at Law, Co-Bond Counsel to the Commission, under existing law (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019H Bonds is excluded from gross income for federal income tax purposes, except interest on any Series 2019E Bond or any Series 2019H Bond for any period during which that Bond is held by a "substantial user" of the facilities financed or a "related person," as those terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended, (ii) interest on the Series 2019E Bonds and the Series 2019H Bonds is an item of tax preference for purposes of the federal alternative minimum tax, (iii) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Series 2019F Bonds is not an item of tax preference for purposes of the federal alternative minimum tax, and (iv) interest on the Series 2019E-H Bonds is exempt from State of California personal income taxes. Interest on the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019H Bonds may be subject to certain federal taxes imposed only on certain corporations. INTEREST ON THE SERIES 2019G BONDS IS NOT EXCLUDED FROM GROSS INCOME FOR FEDERAL INCOME TAX PURPOSES. For a more complete discussion of the tax aspects, see "TAX MATTERS" herein.

\$1,189,175,000 AIRPORT COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO INTERNATIONAL AIRPORT

\$773,475,000
Second Series Revenue Bonds
Series 2019E
(AMT)
\$41,770,000
Second Series Revenue Bonds
Series 2019G
(Federally Taxable)

\$106,925,000
Second Series Revenue Bonds
Series 2019F
(Non-AMT/Governmental Purpose)
\$267,005,000
Second Series Revenue Refunding Bonds
Series 2019H
(AMT)

Dated: Date of Delivery Due: As shown on the inside cover

The Airport Commission (the "Commission") of the City and County of San Francisco (the "City") will issue (i) \$773,475,000 principal amount of its San Francisco International Airport Second Series Revenue Bonds, Series 2019E (the "Series 2019E Bonds"), (ii) \$106,925,000 principal amount of its San Francisco International Airport Second Series Revenue Bonds, Series 2019F (the "Series 2019F Bonds"), (iii) \$41,770,000 principal amount of its San Francisco International Airport Second Series Revenue Bonds, Series 2019G (the "Series 2019G Bonds") and (iv) \$267,005,000 principal amount of its San Francisco International Airport Second Series Revenue Refunding Bonds, Series 2019H (the "Series 2019H Bonds," and, together with the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019G Bonds, the "Series 2019E-H Bonds"), pursuant to the terms of the 1991 Master Resolution.

The San Francisco International Airport (the "Airport") is an enterprise department of the City. The Bank of New York Mellon Trust Company, N.A. has been appointed by the Commission to act as Trustee for its Bonds, including the Series 2019E-H Bonds.

The Commission will use the proceeds of the Series 2019E-H Bonds to finance a portion of the costs of the Capital Improvement Plan; to refund certain outstanding Bonds of the Commission; to repay certain Commercial Paper Notes issued to finance capital projects and to make payments in connection with the termination of interest rate swaps associated with certain of the Bonds to be refunded; to fund a reserve account deposit; to fund a deposit to the Contingency Account as described herein; to pay capitalized interest on a portion of the Series 2019E Bonds, a portion of the Series 2019F Bonds and a portion of the Series 2019G Bonds; and to pay costs of issuance of the Series 2019E-H Bonds.

The Series 2019E-H Bonds will mature on the dates and bear interest at the rates shown on the inside cover of this Official Statement. Interest on the Series 2019E-H Bonds will be payable each May 1 and November 1, commencing May 1, 2020.

The Series 2019E-H Bonds are subject to redemption prior to their stated maturity dates, as described herein.

The Series 2019E-H Bonds will be issued only as fully registered bonds, registered in the name of Cede & Co., as registered owner and nominee of The Depository Trust Company ("DTC"). So long as Cede & Co. is the registered owner of any Series 2019E-H Bonds, payment of the principal of and interest on the Series 2019E-H Bonds will be made to Cede & Co. as nominee of DTC, which is required in turn to remit such principal and interest to the DTC Participants for subsequent disbursement to the Beneficial Owners.

The Series 2019E-H Bonds are special, limited obligations of the Commission, payable as to principal and interest solely out of, and secured by a pledge of and lien on, the Net Revenues of the Airport and the funds and accounts provided for in the 1991 Master Resolution. Neither the credit nor taxing power of the City is pledged to the payment of the principal of or interest on the Series 2019E-H Bonds. No holder of a Series 2019E-H Bond shall have the right to compel the exercise of the taxing power of the City to pay the principal of or the interest on the Series 2019E-H Bonds. The Commission has no taxing power whatsoever.

Purchasers of the Series 2019E-H Bonds will be deemed to have consented to certain amendments to the 1991 Master Resolution. See "Proposed Amendments to 1991 Master Resolution." See "Proposed Amendments to 1991 Master Resolution."

The Series 2019E-H Bonds are offered when, as and if issued by the Commission and received by the Underwriters, subject to approval of validity by Squire Patton Boggs (US) LLP and Amira Jackmon, Attorney at Law, Co-Bond Counsel to the Commission, and certain other conditions. Certain legal matters will be passed upon for the Commission by Nixon Peabody LLP, Disclosure Counsel, and by the City Attorney, and for the Underwriters by their counsel, Hawkins Delafield & Wood LLP. The Commission expects to deliver the Series 2019E-H Bonds through the facilities of DTC on or about September 10, 2019, against payment therefor.

Barclays
Citigroup
Ramirez & Co. Inc.

BofA Merrill Lynch
Goldman Sachs & Co. LLC
Siebert Cisneros Shank & Co. LLC

\$1,189,175,000 AIRPORT COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO INTERNATIONAL AIRPORT

\$773,475,000
Second Series R evenue B onds
Series 2019E
(AMT)
\$41,770,000
Second Series R evenue B onds
Series 2019G
(Federally Taxable)

\$106,925,000
Second Series Revenue Bonds
Series 2019F
(Non-AMT, Governmental Purpose)
\$267,005,000
Second Series Revenue Refunding Bonds
Series 2019H
(AMT)

MATURITY SCHEDULE*

\$773,475,000 Series 2019E Bonds

Maturity Date (May 1)	Principal	Interest Rate	Yield	Price	CUSIP† No.
2034	\$18,955,000	5.000%	1.940% ^c	126.788 ^c	79766DRS0
2035	19,900,000	5.000	1.990 ^c	126.286 ^c	79766DRT8
2036	20,895,000	5.000	2.040°	125.786 ^c	79766DRU5
2037	21,940,000	5.000	2.080 ^c	125.388 ^c	79766DRV3
2038	23,040,000	5.000	2.120°	124.992°	79766DRW 1
2039	24,190,000	5.000	2.160°	124.597 ^c	79766DRX9
2040	25,400,000	5.000	2.200°	124.203 ^c	79766DRY7

\$131,650,000 5.000% Series 2019E Term B onds maturing May 1, 2045 Yield 2.320% Price 123.031 (CUSIP No. 79766DRZ4)

\$100,000,000 4.000% Series 2019E Term B onds maturing May 1, 2050 Yield 2.570% Price 112.140 (CUSIP No. 79766DSB6)

\$387,505,000 5.000% Series 2019E Term B onds maturing May 1, 2050 Yield 2.390% Price 122.354° (CUSIP+ No. 79766DSA8)

\$106,925,000 Series 2019F Bonds

\$106,925,000 5.000% Series 2019F Term B onds maturing May 1, 2050 Yield 2.170% ° Price 124.498° (CUSIP† No. 79766DSC4)

с

^c Priced to call at par on May 1, 2029.

[†] CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by S&P Global Market Intelligence. This information is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP numbers have been assigned by an independent company not affiliated with the Commission or the Underwriters and are included solely for the convenience of the registered owners of the applicable Series 2019E-H Bonds. Neither the Commission nor the Underwriters are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the applicable Series 2019E-H Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2019E-H Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2019E-H Bonds.

\$41,770,000 Series 2019G Bonds

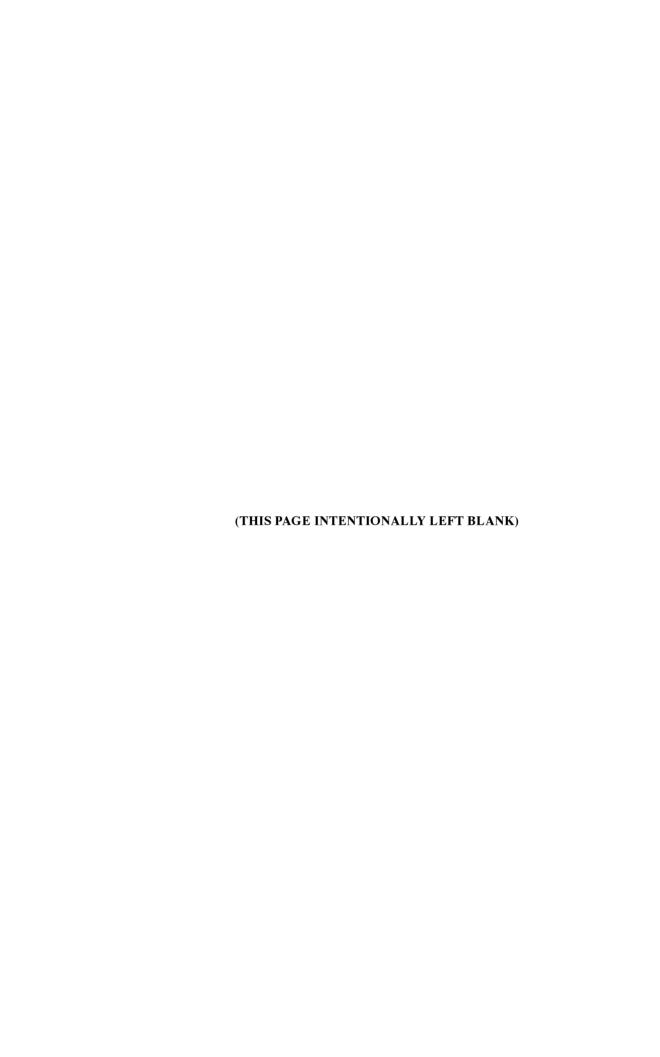
Maturity Date (May 1)	Principal	Interest Rate	Price	CUSIP† No.
2020	\$3,880,000	1.785%	100.000	79766DSQ3
2021	8,755,000	1.785	100.000	79766DSR 1
2022	8,915,000	1.782	100.000	79766DSS9
2023	7,935,000	1.867	100.000	79766DST7
2024	2,570,000	1.977	100.000	79766DSU4
2025	1,530,000	2.057	100.000	79766DSV2
2026	1,565,000	2.167	100.000	79766DSW 0
2027	1,600,000	2.243	100.000	79766DSX8
2028	1,635,000	2.293	100.000	79766DSY6
2029	1,670,000	2.343	100.000	79766DSZ3
2030	1,715,000	2.393	100.000	79766DTA7

\$267,005,000 Series 2019H Bonds

Maturity Date					
(May 1)	Principal	Interest Rate	Yield	Price	CUSIP† No.
2020	\$13,550,000	5.000%	1.100%	102.485	79766DSD2
2021	37,030,000	5.000	1.120	106.292	79766DSE0
2022	18,125,000	5.000	1.150	109.987	79766DSF7
2023	19,520,000	5.000	1.190	113.537	79766DSG5
2024	30,585,000	5.000	1.230	116.956	79766DSH3
2025	35,060,000	5.000	1.290	120.122	79766DSJ9
2026	15,545,000	5.000	1.400	122.754	79766DSK6
2027	34,140,000	5.000	1.480	125.343	79766DSL4
2028	31,305,000	5.000	1.570	127.615	79766DSM2
2029	22,760,000	5.000	1.650	129.746	79766DSN0
2030	9,385,000	5.000	1.740°	128.819 ^c	79766DSP5

^c Priced to call at par on May 1, 2029.

[†] CUSIP® is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services (CGS), which is managed on behalf of the American Bankers Association by S&P Global Market Intelligence. This information is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP numbers have been assigned by an independent company not affiliated with the Commission or the Underwriters and are included solely for the convenience of the registered owners of the applicable Series 2019E-H Bonds. Neither the Commission nor the Underwriters are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the applicable Series 2019E-H Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series 2019E-H Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series 2019E-H Bonds.



CITY AND COUNTY OF SAN FRANCISCO

London B reed, Mayor Dennis J. Herrera, City Attorney B enjamin Rosenfield, Controller José Cisneros, Treasurer

AIRPORT COMMISSION

Larry Mazzola, President Linda S. Crayton, Vice President

Richard J. Guggenhime

Eleanor Johns

Malcolm Yeung

Ivar C. Satero, Airport Director

BOARD OF SUPERVISORS OF THE CITY AND COUNTY OF SAN FRANCISCO

Norman Yee, District 7, President

Sandra Lee Fewer, District 1 Catherine Stefani, District 2 Aaron Peskin, District 3 Gordon Mar, District 4 Vallie Brown, District 5 Matt Haney, District 6 Rafael Mandelman, District 8 Hillary Ronen, District 9 Shamann Walton, District 10 Ahsha Safaí, District 11

CONSULTANTS AND ADVISORS

<u>CO-FINANCIAL ADVISORS</u> Public Financial Management, Inc.

San Francisco, California

Backstrom McCarley Berry & Co., LLC San Francisco, California

> AIRPORT CONSULTANT LeighFisher

Burlingame, California TRUSTEE

The Bank of New York Mellon Trust Company, N.A.
Los Angeles, California

CO-B OND COUNSEL
Squire Patton B oggs (US) LLP
San Francisco, California

Amira Jackmon, Attorney at Law Berkeley, California

DISCLOSURE COUNSEL Nixon Peabody LLP San Francisco, California

AUDITOR KPMG LLP San Francisco, California

VERIFICATION AGENT Robert Thomas CPA, LLC Information Provided by the Commission and by Third Parties. This Official Statement presents information with respect to the Commission and the Airport. The information contained herein has been obtained from officers, employees and records of the Commission and from other sources believed to be reliable. The order and placement of information in this Official Statement, including the appendices, are not an indication of relative importance, and this Official Statement, including the appendices, must be read in its entirety. The captions and headings in this Official Statement are for convenience only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provision in this Official Statement.

Limitations Regarding Offering. No broker, dealer, salesperson or any other person has been authorized to give any information or to make any representations, other than those contained in this Official Statement, in connection with the offering of the Series 2019E H B onds, and if given or made, such information or representations must not be relied upon as having been authorized by the City or the Commission. This Official Statement does not constitute an offer to sell, or the solicitation from any person of an offer to buy, nor shall there be any sale of the Series 2019E H B onds by any person in any jurisdiction where such offer, solicitation or sale would be unlawful. The information set forth herein is subject to change without notice. The delivery of this Official Statement at any time does not imply that information herein is correct or complete as of any time subsequent to its date.

Forward-L ooking Statements. This Official Statement contains forecasts, projections, estimates and other forward-looking statements that are based on current expectations. The words "expects," "forecasts," "projects," "intends," "anticipates," "estimates," "assumes" and analogous expressions are intended to identify forward-looking statements. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results. Any such forward-looking statements inherently are subject to a variety of risks and uncertainties that could cause actual results or performance to differ materially from those that have been forecast, estimated or projected. Such risks and uncertainties include, among others, changes in regional, domestic and international political, social and economic conditions, federal, state and local statutory and regulatory initiatives, litigation, population changes, financial conditions of individual air carriers and the airline industry, technological change, changes in the tourism industry, changes at other San Francisco Bay Area airports, seismic events, international agreements or regulations governing air travel, and various other events, conditions and circumstances, many of which are beyond the control of the Commission. These forward-looking statements speak only as of the date of this Official Statement. The Commission disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any changes in the Commission's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

Underwriters' Disclaimer. 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.

No Securities Registration. The Series 2019E-H B onds have not been registered under the Securities Act of 1933, as amended, in reliance upon an exemption from the registration requirements contained in such Act. The Series 2019E-H B onds have not been registered or qualified under the securities laws of any state.

Ratings of Other Parties. This Official Statement contains information concerning the ratings assigned by Moody's Investors Service, Inc., S&P Global Ratings and Fitch Ratings, Inc. for the Credit Providers, the Swap Counterparties and the Guarantors of the Swap Counterparties, if any (each as defined herein). Such ratings reflect only the view of the agency giving such rating and are provided for convenience of reference only. Such rating information has been obtained from sources believed to be reliable but has not been confirmed or re-verified by such rating agencies. None of the Commission, the City or any of the Underwriters takes any responsibility for the accuracy of such ratings, gives any assurance that such ratings will apply for any given period of time, or that such ratings will not be revised downward or withdrawn if, in the judgment of the agency providing such rating, circumstances so warrant.

Web Sites Not Incorporated. References to web site addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such web sites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement. The Commission and the City each maintain a website and the information presented on those websites is not incorporated by reference as part of this Official Statement and should not be relied upon in making investment decisions with respect to the Series 2019E-H B onds.

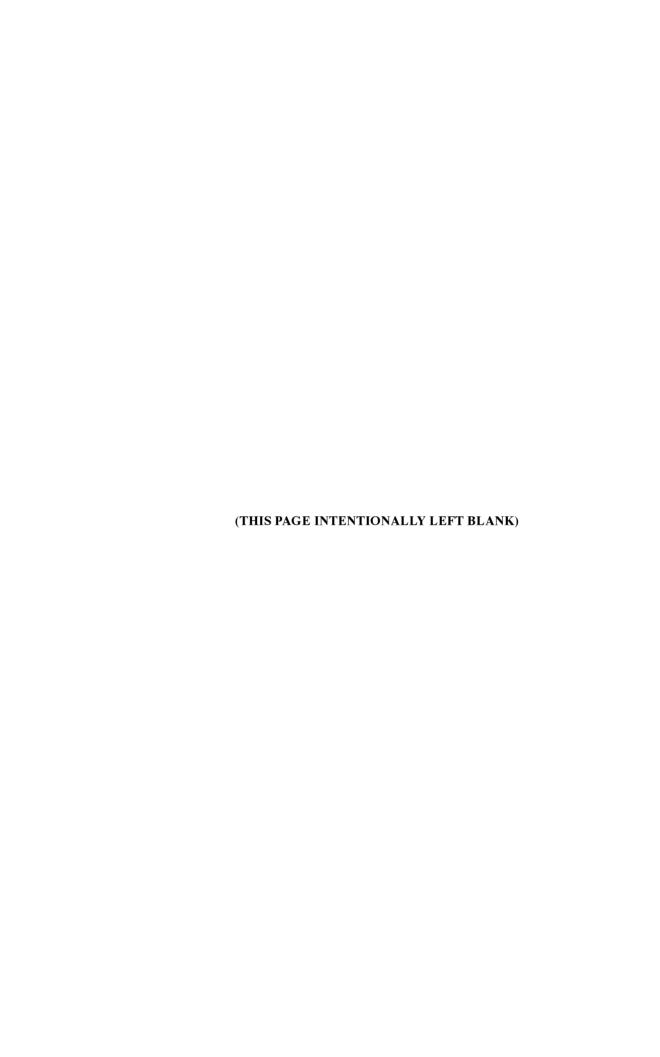
TABLE OF CONTENTS

<u>Page</u>	<u>Pa</u>	<u>ige</u>
INTRODUCTION1	Potential Limitation of Tax Exemption of Intere	st
PROPOSED AMENDMENTS TO 1991 MASTER	on Series 2019E-H Bonds	
RESOLUTION2	Risk of Tax Audit	33
PLAN OF FINANCE AND REFUNDING3	Income Taxation Risk Upon Defeasance of the	
Financing of Capital Projects3	Series 2019G Bonds	33
Deposit to Original Reserve Account3	SAN FRANCISCO INTERNATIONAL	
Deposit to Contingency Account3	AIRPORT	
Refunding Plan for Refunded Bonds3	Introduction	33
ESTIMATED SOURCES AND USES OF FUNDS .4	Organization and Management	33
DESCRIPTION OF THE SERIES 2019E-H	Airport Senior Management and Legal Counsel.	34
B ONDS4	Current Airport Facilities	
General4	On-Time Performance and Congestion	40
Redemption Provisions5	Airport Security	40
Transfer and Exchange10	Airline Service	40
Defeasance10	Passenger Traffic	
SECURITY FOR THE SERIES 2019E-H BONDS 10	Cargo Traffic and Landed Weight	48
Authority for Issuance10	Competition	
Pledge of Net Revenues; Source of Payment 10	Airline Agreements	51
Rate Covenant13	Certain Federal and State Laws and Regulations	55
Contingency Account13	Employee Relations	58
Flow of Funds14	Hazardous Material Management	58
Flow of Funds Chart15	Airport Climate Change Goals and Initiatives	
Additional Bonds16	CAPITAL PROJECTS AND PLANNING	
Reserve Fund; Reserve Accounts; Credit	The Capital Improvement Plan Process	
Facilities17	The Capital Improvement Plan	
Contingent Payment Obligations20	Airport Development Plan	
No Acceleration20	Other Anticipated Capital Needs	
Other Indebtedness21	Federal Grants	
Rights of Bond Insurers23	AIRPORT'S FINANCIAL AND RELATED	
CERTAIN RISK FACTORS23	INFORMATION	68
Local Economy23	General	68
Uncertainties of the Aviation Industry24	Summary of Financial Statements	
Limitations on Additional Liquidity25	Operating Revenues	
Bankruptcy of Airlines Operating at the Airport 25	Principal Revenue Sources	
Risks Related to the Commission's Capital	Aviation Revenues	71
Projects26	Ground Transportation Revenues	72
Competition26	Concessions Revenues	74
Uncertainties of Projections, Forecasts and	Top Ten Sources of Concession Revenues	75
Assumptions27	Passenger Facility Charge	
Technological Innovations27	Operating Expenses	79
Seismic and Other Natural Disasters or	Payments to the City	
Emergencies28	Budget Process	
Risks Associated with Global Climate Change 29	Risk Management and Insurance	83
Cybersecurity30	Investment of Airport Funds	
Credit Risk of Financial Institutions Providing	Currently Outstanding Bonds	
Credit Enhancement and Other Financial	Credit Facilities	
Products Relating to Airport Bonds30	Interest Rate Swaps	
Limitation of Remedies31	Debt Service Requirements	
Potential Effect of a City Bankruptcy31	Historical Debt Service Coverage	
Future Legislation and Regulation32	SFOTEC	
Initiative, Referendum and Charter Amendments 32	REPORT OF THE AIRPORT CONSULTANT	
	General	

Table of Contents (continued)

	Page		Page
Forecast of Debt Service Coverage	92	Series 2019G Bonds (Taxable)	98
AIRLINE INFORMATION		VERIFICATION OF MATHEMATICAL	
LITIGATION MATTERS		COMPUTATIONS	
RATINGS		APPROVAL OF LEGAL PROCEEDINGS	100
UNDERWRITING		PROFESSIONALS INVOLVED IN THE	100
Purchase of Series 2019E + Bonds		OFFERINGFINANCIAL STATEMENTS	
Retail Brokerage Arrangements CERTAIN RELATIONSHIPS		CONTINUING DISCLOSURE	
TAX MATTERS		MISCELLANEOUS	
Tax-Exempt Bonds		11130222, 1112003	
	APPENE	DICES	
APPENDIX A - REPORT OF THE AIR	PORT CONSULT	「ANT	A-1
APPENDIX R - FINANCIAI STATEM	IENTS WITH SCI	HEDULE OF PASSENGER FACILITY CHARG	7.F
REVENUES AND EXI	PENDITURES JU	NE 30, 2018 AND 2017 (WITH INDEPENDEN	IT
		ND THE BOOK-ENTRY ONLY SYSTEM	
		IS OF THE 1991 MASTER RESOLUTION	
		IS OF THE LEASE AND USE AGREEMENTS	
			E-I
		IS OF THE CONTINUING DISCLOSURE	F-1
APPENDIX G - PROPOSED FORM OF	OPINION OF CO	O-BOND COUNSEL	G-1
APPENDIX H - SUMMARY OF PROPO	OSED AMENDM	ENTS TO 1991 MASTER RESOLUTION	H-1
APPENDIX I – LIST OF REFUNDED B	ONDS		I-1
	INDEX OF	TABLES	
			<u>Page</u>
Series 2019E-H Bonds Estimated Sources	s and Uses		4
		, 2045 Term B ond)	
		, 2050 4.000% Term B ond)	
Series 2019E Mandatory Sinking Fund Re	edemption (May 1	, 2050 5.000% Term B ond)	8
Passenger Traffic			43
•			
Capital Improvement Plan	-		61
		ad Chaumas in Nat Dasition	
Summary of Airport's Statement of Reve	nues, Expenses, ar	nd Changes in Net Position	/0

Top Ten Sources of Revenue	71
Airline Payments Per Enplaned Passenger	72
Historical and Current Landing Fees and Terminal Rentals	
Top Ten Sources of Airport Concession Revenues	76
Summary of Airport PFC Applications	77
PFC Collections Applied by the Commission for Payment of Debt Service on Outstanding Bonds	78
Summary of Payments Made by the Airport to the City	80
City and County of San Francisco Employees' Retirement SystemSystem	81
Airport Contributions to the Retirement System	81
Airport Contributions to the Health Service System	82
Investment Distribution of City Pooled Investment Fund	85
Book Value of Airport Funds in City Pooled Investment Fund	85
Currently Outstanding Bonds	86
Credit Facilities for Bonds	87
Summary of Interest Rate Swap Agreements	89
Debt Service Schedule	90
Historical Debt Service Coverage	91
Forecast of Debt Service Coverage	93



OFFICIAL STATEMENT

\$1,189,175,000 AIRPORT COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO SAN FRANCISCO INTERNATIONAL AIRPORT

\$773,475,000
Second Series Revenue Bonds
Series 2019E
(AMT)
\$41,770,000
Second Series Revenue Bonds
Series 2019G
(Federally Taxable)

\$106,925,000
Second Series Revenue B onds
Series 2019F
(Non-AMT, G overnmental Purpose)
\$267,005,000
Second Series R evenue R efunding B onds
Series 2019H
(AMT)

INTRODUCTION

The Airport Commission (the "Commission") of the City and County of San Francisco (the "City") will issue (i) \$773,475,000 principal amount of its San Francisco International Airport Second Series Revenue Bonds, Series 2019E (the "Series 2019E Bonds"), (ii) \$106,925,000 principal amount of its San Francisco International Airport Second Series Revenue Bonds, Series 2019F (the "Series 2019F Bonds"), (iii) \$41,770,000 principal amount of its San Francisco International Airport Second Series Revenue Bonds, Series 2019G (the "Series 2019G Bonds") and (iv) \$267,005,000 principal amount of its San Francisco International Airport Second Series Revenue Refunding Bonds, Series 2019H (the "Series 2019H Bonds," and together with the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019G Bonds, the "Series 2019E-H Bonds"), pursuant to the terms of the 1991 Master Resolution (defined below).

The Commission authorized the issuance and sale of the Series 2019E-H B onds under Resolution No. 91–0210, which the Commission adopted on December 3, 1991, as supplemented and amended (the "1991 Master Resolution"). The Series 2019E-H B onds, together with all bonds that the Commission has issued and will issue in the future pursuant to the 1991 Master Resolution, are referred to as the "B onds." For a summary of the Commission's Outstanding B onds, see "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Currently Outstanding B onds." Capitalized terms used and not defined in this Official Statement have the meanings given those terms in the 1991 Master Resolution. The Commission has appointed The B ank of New Y ork Mellon Trust Company, N.A. to act as trustee (the "Trustee") for the B onds, including the Series 2019E-H B onds. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Certain Definitions."

The Commission will use the proceeds of the Series 2019E-H B onds to finance a portion of the costs of its Capital Improvement Plan (described herein); to refund certain outstanding B onds of the Commission; to repay certain Commercial Paper Notes issued to finance capital projects and to make payments in connection with the termination of interest rate swaps associated with certain of the B onds to be refunded; to fund deposits to the Original Reserve Account described herein; to fund a deposit to the Contingency Account as described herein; to pay capitalized interest on a portion of the Series 2019E, a portion of the Series 2019F B onds and a portion of the Series 2019G B onds; and to pay costs of issuance of the Series 2019E-H B onds. See "PLAN OF FINANCE AND REFUNDING" and "ESTIMATED SOURCES AND USES OF FUNDS."

The Series 2019E-H Bonds will mature on the dates, in the amounts and bear interest at the rates shown on the pages immediately following the front cover of this Official Statement.

The Commission will secure the Series 2019E-H B onds with a pledge of, lien on and security interest in Net Revenues of the San Francisco International Airport (the "Airport") on parity with the Commission's other Outstanding B onds, which, as of July 1, 2019, were outstanding in the amount of approximately \$7.3 billion, and any additional B onds. See "Security for the Series 2019E-H Bonds" and "Airport's Financial and Related Information-Currently Outstanding B onds." The proceeds of additional B onds are expected to be a significant

source of funding for the Commission's Capital Improvement Plan. The Series 2019E-H B onds will be additionally secured by the Original Reserve Account. See "SECURITY FOR THE SERIES 2019E-H B ONDS-Reserve Fund; Reserve Accounts; Credit Facilities-Original Reserve Account."

This Official Statement contains brief descriptions or summaries of, among other things, the Series 2019E-H B onds, the 1991 Master Resolution, the Lease and Use Agreements, the Reserve Account Credit Facilities, the Swap Agreements and the Continuing Disclosure Certificate of the Commission. Any description or summary in this Official Statement of any such document is qualified in its entirety by reference to each such document.

On October 3, 2017, the Commission adopted a resolution (the "Twenty-First Supplemental Resolution"), which sets forth a number of amendments to the 1991 Master Resolution (the "Proposed Amendments"). The Proposed Amendments will become effective in the manner described under "PROPOSED AMENDMENTS TO 1991 MASTER RESOLUTION" and in Appendix H-"SUMMARY OF PROPOSED AMENDMENTS TO 1991 MASTER RESOLUTION." By their purchase of the Series 2019E-H Bonds, the purchasers of the Series 2019E-H Bonds consent to the Proposed Amendments and authorize the Trustee to take all actions necessary to evidence or effect such consent.

PROPOSED AMENDMENTS TO 1991 MASTER RESOLUTION

The Proposed Amendments include, among other amendments, changes to how Revenues, Annual Debt Service and Maximum Annual Debt Service are calculated, the required ratings on certain Permitted Investments, what investments are included in Permitted Investments, the required ratings of certain obligations of a financial institution providing a Credit Facility that may be deposited to the Original Reserve Account in the future, and how amendments to the 1991 Master Resolution become effective. See Appendix H-"SUMMARY OF PROPOSED AMENDMENTS TO 1991 MASTER RESOLUTION" for a more detailed description of the Proposed Amendments.

The Proposed Amendments will become effective only upon the satisfaction of certain conditions, including (i) receipt by the Commission of the consent of the Holders of a majority in aggregate principal amount of all Outstanding Bonds, and/or in certain cases, Holders of a majority in aggregate principal amount of all Outstanding Bonds secured by the Original Reserve Account, and (ii) delivery of a certificate from the Airport Director (A) declaring that all other consents required for such amendments have been obtained (i.e., the applicable consents of the applicable Credit Providers), and (B) electing that such amendments shall be effective. The Bondholder consent requirements with respect to the General Proposed Amendments (as defined in APPENDIX H) have been satisfied. The Commission has not yet obtained all of the other consents required for the General Proposed Amendments. The General Proposed Amendments will not be effective until other required consents are received and other conditions are met, as described above.

As of July 1, 2019, approximately 45.2% of the Holders of the Outstanding B onds secured by the Original Reserve Account have consented to the Original Reserve Proposed Amendments (as defined in APPENDIX H). On the date of issuance of the Series 2019E-H B onds, it is expected that the Holders of greater than a majority in aggregate principal amount of the then-Outstanding B onds secured by the Original Reserve Account will have consented to the Original Reserve Proposed Amendments, and the B ondholder consent requirement with respect to such amendments is expected to be satisfied. The Original Reserve Proposed Amendments will not be effective until other required consents are received and other conditions are met, as described above.

The Proposed Amendments may become effective on different dates and not all amendments may become effective.

By their purchase of the Series 2019E + Bonds, the purchasers of the Series 2019E + Bonds consent to the General Proposed Amendments and the Original Reserve Proposed Amendments and authorize the Trustee to take all actions necessary to evidence or effect such consent.

PLAN OF FINANCE AND REFUNDING

The Commission will use the proceeds of the Series 2019E-H B onds to finance a portion of the costs of the Capital Improvement Plan; to refund certain outstanding B onds of the Commission; to repay certain Commercial Paper Notes issued to finance capital projects and to make payments in connection with the termination of interest rate swaps associated with certain of the B onds to be refunded; to fund deposits to the Original Reserve Account; to fund a deposit to the Contingency Account as described herein; to pay capitalized interest on a portion of the Series 2019E B onds, a portion of the Series 2019F B onds, and a portion of the Series 2019G B onds; and to pay costs of issuance of the Series 2019E-H B onds.

Financing of Capital Projects

A portion of the proceeds of the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019G Bonds are expected to be used to finance and refinance a portion of the costs of the following projects, among others: redevelopment of Terminal 1; redevelopment of Terminal 3 West; construction of the Courtyard 3 Connector (a secure connector between Terminals 2 and 3); renovation of the International Terminal departures level; gate enhancements; and extension of AirTrain service to the long-term parking garages. The Commission may ultimately apply proceeds of the Series 2019E Bonds, the Series 2019F Bonds and Series 2019G Bonds to additional or other projects. For further descriptions of these projects, see "CAPITAL PROJECTS AND PLANNING-The Capital Improvement Plan" and APPENDIX A— "AIRPORT CAPITAL IMPROVEMENT PLAN AND FUNDING-Summary of the Capital Improvement Plan-Projects in the Capital Improvement Plan."

A portion of the proceeds of the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019G Bonds will be used to repay approximately \$19.4 million in principal amount of the Commission's Commercial Paper Notes issued to finance capital projects within 90 days of the date of delivery of the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019G Bonds. The proceeds of these Commercial Paper Notes were used to finance costs of projects in the Capital Improvement Plan.

A portion of the proceeds of the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019G Bonds will be used to pay interest on a portion of such Bonds.

Deposit to Original Reserve Account

A portion of the proceeds of the Series 2019E-H B onds, together with other available moneys, will be used to make a deposit in the amount of \$58,366,189.13 into the Original Reserve Account. See "Security for the Series 2019E-H Bonds-Reserve Fund; Reserve Accounts; Credit Facilities-Original Reserve Account."

Deposit to Contingency Account

A portion of the proceeds of the Series 2019G B onds and the proceeds of taxable Commercial Paper Notes are being used to make a deposit in the amount of \$8.0 million into the Contingency Account. A portion of the proceeds of the Series 2019G B onds will be used to repay such Commercial Paper Notes. See "SECURITY FOR THE SERIES 2019E-H B ONDS-Contingency Account."

Refunding Plan for Refunded Bonds

A portion of the proceeds of the Series 2019G B onds and the Series 2019H B onds, along with certain other available moneys, will be used to current refund and defease the Outstanding B onds listed and identified as the Refunded B onds on APPENDIX I – "LIST OF REFUNDED B ONDS" (collectively, the "Refunded B onds"). The Refunded B onds will be redeemed on the respective dates set forth in APPENDIX I.

Proceeds of the Series 2019G B onds and Series 2019H B onds, together with certain other available moneys, including certain amounts held pursuant to the 1991 Master Resolution, will be deposited with The B ank of New Y ork Mellon Trust Company, N.A., as escrow agent (the "Escrow Agent") pursuant to an Escrow Agreement (the "Escrow Agreement"), to be executed and delivered by the Commission and the Escrow Agent. The amount deposited with

the Escrow Agent under the Escrow Agreement will be sufficient, together with investment earnings thereon, to pay the redemption price of the Refunded B onds (as set forth in APPENDIX I) and accrued interest on the Refunded B onds on the applicable redemption dates. See also "VERIFICATION OF MATHEMATICAL COMPUTATIONS."

The Commission issued taxable Commercial Paper Notes in connection with the termination of interest rate swaps associated with some of the Refunded Bonds, and will use a portion of the Series 2019G Bond proceeds to repay such taxable Commercial Paper Notes. This payment is in addition to the payments of Commercial Paper Notes described above under "-Financing of Capital Projects" and "-Deposit to Contingency Account."

ESTIMATED SOURCES AND USES OF FUNDS

The following table sets forth the estimated sources and uses of funds for the Series 2019E-H B onds.

Series 2019E-H Bonds Estimated Sources and Uses

	Series 2019E Bonds	Series 2019F Bonds	Series 2019G Bonds	Series 2019H Bonds	Total
SOURCES OF FUNDS:					
Principal Amount	\$773,475,000.00	\$106,925,000.00	\$41,770,000.00	\$267,005,000.00	\$1,189,175,000.00
Plus: Original Issue Premium	168,205,603.60	26,194,486.50	_	49,668,915.05	244,069,005.15
Other Funds of the Airport(1)	10,870,855.28	1,026,294.89	308.33	16,194,656.25	28,092,114.75
Total	\$952,551,458.88	\$134,145,781.39	\$41,770,308.33	\$332,868,571.30	\$1,461,336,119.90
USES OF FUNDS:					
Deposit to Construction Accounts	\$837,790,000.00	\$109,425,000.00	\$7,600,000.00	_	\$954,815,000.00
Commercial Paper Repayment(2)	4,700,000.00	14,110,000.00	600,000.00	_	19,410,000.00
Capitalized Interest(3)	54,429,392.06	5,246,585.06	226,286.80	_	59,902,263.92
Deposit to Contingency Account(4)	=	-	8,000,000.00	=	8,000,000.00
Deposit to Refunded B onds Redemption Account	-	-	25,338.99	\$332,256,699.36	332,282,038.35
Swap Termination Payments ⁽⁵⁾	_	_	25,067,000.00	-	25,067,000.00
Deposit to Original Reserve Account	53,331,292.46	5,034,896.67	_	_	58,366,189.13
Underwriters' Discount	1,335,545.95	185,173.30	50,404.71	330,659.68	1,901,783.64
Costs of Issuance(6)	965,228.41	144,126.36	201,277.83	281,212.26	1,591,844.86
TOTAL	\$952,551,458.88	\$134,145,781.39	\$41,770,308.33	\$332,868,571.30	\$1,461,336,119.90

¹⁾ Includes funds from various funds and accounts related to the Refunded B onds under the 1991 Master Resolution.

DESCRIPTION OF THE SERIES 2019E-H BONDS

General

The Series 2019E-H B onds will be dated their date of issuance. The Series 2019E-H B onds will bear interest at the rates and mature in the amounts and on the dates shown on the pages immediately following the front cover of this Official Statement. Interest on the Series 2019E-H B onds will be payable on May 1 and November 1 of each year, commencing May 1, 2020 (each an "Interest Payment Date"). Interest will be calculated on the basis of a 360-day year comprised of twelve 30-day months.

The Series 2019E-H Bonds will be issued as fully registered securities, without coupons, and will be registered in the name of Cede & Co. as registered owner and nominee of The Depository Trust Company ("DTC").

⁽²⁾ Repayment of Commercial Paper Notes issued to finance capital projects.

⁽³⁾ Represents capitalized interest on a portion of the Series 2019E B onds, a portion of the Series 2019F B onds, and a portion of the Series 2019G B onds.

⁽⁴⁾ A portion of the deposit to the Contingency Account is being made with proceeds of Commercial Paper Notes that are being repaid with Series 2019G B and proceeds.

⁽⁵⁾ The swap termination payments were paid with Commercial Paper Notes that are being repaid with Series 2019G B and proceeds.

⁽⁶⁾ Includes fees and expenses of Co-B and Counsel, Disclosure Counsel, the Co-Financial Advisors, the Verification Agent, the Trustee, the Escrow Agent and the Airport Consultant, printing costs, rating agency fees, and other miscellaneous costs associated with the issuance of the Series 2019E-H B ands.

Beneficial ownership interests in the Series 2019E-H B onds will be available in book-entry form only, in Authorized Denominations of \$5,000 and any integral multiple thereof. Purchasers of beneficial ownership interests in the Series 2019E-H B onds ("B eneficial Owners") will not receive certificates representing their interests in the Series 2019E-H B onds purchased. While held in book-entry form, all payments of principal of and interest on the Series 2019E-H B onds will be made by wire transfer to DTC or its nominee as the sole registered owner of the Series 2019E-H B onds. Payments to B eneficial Owners are the sole responsibility of DTC and its Participants. See APPENDIX C-"INFORMATION REGARDING DTC AND THE BOOK-ENTRY ONLY SYSTEM."

Redemption Provisions

Optional Redemption of the Series 2019E Bonds, Series 2019F Bonds and Series 2019H Bonds (Par Call)

The Series 2019E B onds are subject to redemption prior to their respective stated maturity dates, at the option of the Commission, from any source of available funds (other than mandatory sinking fund payments), as a whole or in part, in Authorized Denominations, on any B usiness Day on or after May 1, 2029, at a redemption price equal to 100% of the principal amount of the Series 2019E B onds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

The Series 2019F B onds are subject to redemption prior to their stated maturity date, at the option of the Commission, from any source of available funds (other than mandatory sinking fund payments), as a whole or in part, in Authorized Denominations, on any B usiness Day on or after May 1, 2029, at a redemption price equal to 100% of the principal amount of the Series 2019F B onds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

The Series 2019H B onds maturing before May 1, 2030 are not subject to optional redemption. The Series 2019H B onds maturing on May 1, 2030 are subject to redemption prior to their stated maturity date, at the option of the Commission, from any source of available funds, as a whole or in part, in Authorized Denominations, on any B usiness Day on or after May 1, 2029, at a redemption price equal to 100% of the principal amount of the Series 2019H B onds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

Any notice of optional redemption for the Series 2019E Bonds, Series 2019F Bonds or the Series 2019H Bonds may be conditional and may be cancelled and annulled by the Commission for any reason on or prior to the date fixed for redemption. Such cancellation does not constitute an Event of Default under the 1991 Master Resolution.

Optional Redemption of the Series 2019G Bonds (Make-Whole Redemption)

The Series 2019G B onds are subject to redemption prior to their respective stated maturity dates, at the option of the Commission, from any source of available funds, as a whole or in part, in Authorized Denominations, on any B usiness Day at a redemption price equal to 100% of the principal amount of the Series 2019G B onds called for redemption, plus the Make-W hole Premium (as defined below), if any, together with accrued interest to the date fixed for redemption. Any notice of optional redemption for the Series 2019G B onds may be conditional and may be cancelled and annulled by the Commission for any reason on or prior to the date fixed for redemption. Such cancellation does not constitute an Event of Default under the 1991 Master Resolution.

For purposes of the foregoing paragraph, the following terms are defined as follows:

"Make-Whole Premium" means, with respect to any Series 2019G B and to be redeemed, an amount calculated by an Independent B anking Institution (as defined below) equal to the positive difference, if any, between:

- (1) The sum of the present values, calculated as of the date fixed for redemption, of:
- (a) Each interest payment that, but for the redemption, would have been payable on the Series 2019G Bond or portion thereof being redeemed on each regularly scheduled Interest

Payment Date occurring after the date fixed for redemption through the maturity date of such Series 2019G B and (excluding any accrued interest for the period prior to the date fixed for redemption); plus

- (b) The principal amount that, but for such redemption, would have been payable on the maturity date of the Series 2019G B and or portion thereof being redeemed; minus
- (2) The principal amount of the Series 2019G B and or portion thereof being redeemed.

The present values of the interest and principal payments referred to in (1) above will be determined by discounting the amount of each such interest and principal payment from the date that each such payment would have been payable but for the redemption to the date fixed for redemption on a semiannual basis (assuming a 360-day year consisting of twelve (12) 30-day months) at a discount rate equal to the Comparable Treasury Yield plus (i) five (5) basis points for the Series 2019G B onds maturing May 1, 2020 through May 1, 2022, (ii) ten (10) basis points for the Series 2019G B onds maturing May 1, 2023 through May 1, 2027 and (iii) fifteen (15) basis points for the Series 2019G B onds maturing May 1, 2028 through May 1, 2030.

"Comparable Treasury Yield" means the yield which represents the weekly average yield to maturity for the preceding week appearing in the most recently published statistical release designated "H.15(519) Selected Interest Rates" under the heading "Treasury Constant Maturities," or any successor publication selected by the Independent Banking Institution that is published weekly by the Board of Governors of the Federal Reserve System and that establishes yields on actively traded United States Treasury securities adjusted to constant maturity, for the maturity corresponding to the remaining term to maturity of the Series 2019G Bonds being redeemed. The Comparable Treasury Yield will be determined as of the 10th Business Day immediately preceding the applicable date fixed for redemption. If the H.15(519) statistical release sets forth a weekly average yield for United States Treasury securities that have a constant maturity that is the same as the remaining term to maturity of the Series 2019G Bonds being redeemed, then the Comparable Treasury Yield will be equal to such weekly average yield. In all other cases, the Comparable Treasury Yield will be calculated by interpolation on a straight-line basis, between the weekly average yields on the United States Treasury securities that have a constant maturity (a) closest to and greater than the remaining term to maturity of the Series 2019G B onds being redeemed; and (b) closest to and less than the remaining term to maturity of the Series 2019G Bonds being redeemed. Any weekly average yields calculated by interpolation will be rounded to the nearest 1/100th of 1%, with any figure of 1/200th of 1% or above being rounded upward.

If, and only if, weekly average yields for United States Treasury securities for the preceding week are not available in the H.15(519) statistical release or any successor publication, then the Comparable Treasury Yield will be the rate of interest per annum equal to the semiannual equivalent yield to maturity of the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price (each as defined herein) as of the date fixed for redemption.

"Comparable Treasury Issue" means the United States Treasury security selected by the Independent Banking Institution as having a maturity comparable to the remaining term to maturity of the Series 2019G B onds being redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term to maturity of the Series 2019G B onds being redeemed.

"Independent B anking Institution" means an investment banking institution of national standing which is a primary United States government securities dealer in the City of New York designated by the Commission (which may be one of the Underwriters). If the Commission fails to appoint an Independent B anking Institution at least 30 days prior to the date fixed for redemption, or if the Independent B anking Institution appointed by the Commission is unwilling or unable to determine the Comparable Treasury Yield, the Comparable Treasury Yield will be determined by an Independent B anking Institution designated by the Trustee in consultation with the Commission.

"Comparable Treasury Price" means, with respect to any date on which a Series 2019G B and or portion thereof is being redeemed, either (a) the average of five Reference Treasury Dealer quotations for the date fixed for redemption, after excluding the highest and lowest such quotations, and (b) if the Independent B anking Institution is unable to obtain five such quotations, the average of the quotations that are obtained. The quotations will be the average, as determined by the Independent B anking Institution, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of principal amount) quoted in writing to the Independent B anking Institution, at 5:00 p.m. New York City time on the 10th B usiness Day preceding the date fixed for redemption.

"Reference Treasury Dealer" means a primary United States Government securities dealer in the United States appointed by the Commission and reasonably acceptable to the Independent Banking Institution (which may be one of the Underwriters). If the Commission fails to select the Reference Treasury Dealers within a reasonable period of time, the Trustee will select the Reference Treasury Dealers in consultation with the Commission.

Mandatory Sinking Fund Redemption

The Series 2019E Bonds maturing on May 1, 2045 are subject to mandatory sinking fund redemption prior to their stated maturity date, in part, by lot, from mandatory sinking fund payments, at a redemption price equal to 100% of the principal amount thereof plus accrued interest thereon to the date of redemption, without premium, on the dates and in the amounts, as set forth below:

Series 2019E
May 1, 2045 Term Bond
Mandatory Sinking Fund Redemption

Mandatory Sinking Fund Redemption Date (May 1)	Mandatory Sinking Fund Payment
2041	\$26,670,000
2042	28,005,000
2043	29,405,000
2044	30,875,000
2045 [†]	16,695,000
† Maturity.	

The Series 2019E B onds maturing on May 1, 2050 and bearing interest at a rate of 4.000% are subject to mandatory sinking fund redemption prior to their stated maturity date, in part, by lot, from mandatory sinking fund payments, at a redemption price equal to 100% of the principal amount thereof plus accrued interest thereon to the date of redemption, without premium, on the dates and in the amounts, as set forth below:

[Remainder of Page Intentionally Left Blank]

Series 2019E May 1, 2050 4.000% Term Bond Mandatory Sinking Fund Redemption

Mandatory Sinking Fund	
Redemption Date	Mandatory Sinking Fund
(May 1)	Payment
2046	\$ 3,620,000
2047	3,785,000
2048	3,970,000
2049	4,165,000
2050†	84,460,000
† Maturity.	

The Series 2019E B onds maturing on May 1, 2050 and bearing interest at a rate of 5.000% are subject to mandatory sinking fund redemption prior to their stated maturity date, in part, by lot, from mandatory sinking fund payments, at a redemption price equal to 100% of the principal amount thereof plus accrued interest thereon to the date of redemption, without premium, on the dates and in the amounts, as set forth below:

Series 2019E
May 1, 2050 5.000% Term Bond
Mandatory Sinking Fund Redemption

Mandatory Sinking Fund Redemption Date (May 1)	Mandatory Sinking Fund Payment
2046	\$ 13,915,000
2047	14,590,000
2048	15,280,000
2049	16,015,000
2050 [†]	327,705,000
† Maturity.	

The Series 2019F B onds are subject to mandatory sinking fund redemption prior to their stated maturity date, in part, by lot, from mandatory sinking fund payments, at a redemption price equal to 100% of the principal amount thereof plus accrued interest thereon to the date of redemption, without premium, on the dates and in the amounts, as set forth below:

[Remainder of Page Intentionally Left Blank]

Series 2019F Mandatory Sinking Fund Redemption

Mandatory Sinking Fund Redemption Date (May 1)	Mandatory Sinking Fund Payment
2045	\$15,720,000
2046	16,505,000
2047	17,330,000
2048	18,200,000
2049	19,105,000
2050 [†]	20,065,000

[†] Maturity.

Selection of Series 2019E-H Bonds for Redemption

<u>Series 2019E Bonds, Series 2019F Bonds and Series 2019H Bonds.</u> The Commission shall select the maturities and specific interest rate of the Series 2019E Bonds, Series 2019F Bonds and the Series 2019H Bonds to be optionally redeemed.

Except as otherwise described in APPENDIX C-"INFORMATION REGARDING DTC AND THE BOOK-ENTRY ONLY SYSTEM," if less than all of a maturity and specific interest rate of the Series 2019E Bonds, Series 2019F Bonds or the Series 2019H Bonds is to be optionally redeemed, the Series 2019E Bonds, Series 2019F Bonds or the Series 2019H Bonds, as applicable, to be optionally redeemed shall be selected by lot in such manner as the Trustee shall determine. If the Series 2019E Bonds or Series 2019F Bonds to be optionally redeemed are Term Bonds, the Commission shall designate to the Trustee the mandatory sinking fund payment or payments against which the principal amount of the Series 2019E Bonds or Series 2019F Bonds, as applicable, of the maturity optionally redeemed shall be credited.

<u>Series 2019G B onds</u>. The Commission shall select the maturities of the Series 2019G B onds to be optionally redeemed.

If less than all of the Series 2019G B onds of a maturity are redeemed prior to their respective stated maturity dates, the particular Series 2019G B onds to be redeemed will be selected on a pro-rata pass-through distribution of principal basis in accordance with the rules and procedures of DTC. It is the Commission's intent that redemption allocations made by DTC, the DTC participants or such other intermediaries that may exist between the Commission and the beneficial owners of the Series 2019G B onds shall be made on a pro-rata pass-through distribution of principal basis. However, so long as the Series 2019G B onds are in book-entry only form, the selection for redemption of such Series 2019G B onds shall be made in accordance with the operational arrangements of DTC then in effect. Neither the Commission nor the Trustee shall provide any assurance or shall have any responsibility or obligation to ensure that DTC, the DTC participants or any other intermediaries allocate redemptions of the Series 2019G B onds among beneficial owners on a pro-rata pass-through distribution of principal basis. If the DTC operational arrangements do not allow for the redemption of the Series 2019G B onds on a pro-rata pass-through distribution of principal basis, the Series 2019G B onds shall be selected for redemption, in accordance with DTC procedures, by lot.

Notice of Redemption

The Trustee is required to give notice of redemption by first-class mail or electronic means, at least 30 days but not more than 60 days prior to the redemption date, to the registered owners of the Series 2019E-H B onds to be redeemed, all organizations registered with the Securities and Exchange Commission (the "SEC") as securities depositories, and at least two information services of national recognition which disseminate redemption information with respect to municipal securities.

So long as the Series 2019E-H Bonds are in book-entry only form through the facilities of DTC, notice of redemption will be provided to Cede & Co., as the registered owner of the applicable Series 2019E-H Bonds, and not directly to the Beneficial Owners.

Any notice of optional redemption may be cancelled and annulled by the Commission for any reason on or prior to the date fixed for redemption. Such cancellation would not constitute an Event of Default under the 1991 Master Resolution.

Transfer and Exchange

The Series 2019E-H B onds will be issued only as fully registered securities, with the privilege of transfer or exchange in Authorized Denominations for Series 2019E-H B onds of an equal aggregate principal amount, of the same series, bearing the same interest rate and having the same maturity date, as set forth in the 1991 Master Resolution. All such transfers and exchanges shall be without charge to the owner, with the exception of any taxes, fees or other governmental charges that are required to be paid to the Trustee as a condition to transfer or exchange. While the Series 2019E-H B onds are in book-entry only form, beneficial ownership interests in the Series 2019E-H B onds may only be transferred through Direct Participants and Indirect Participants as described in APPENDIX C"INFORMATION REGARDING DTC AND THE B OOK-ENTRY ONLY SYSTEM."

Defeasance

Upon deposit by the Commission with the Trustee, at or before maturity, of money or noncallable Government Obligations, Government Certificates or certain pre-funded municipal obligations described in the definition of Permitted Investments which, together with the earnings thereon, are sufficient to pay the principal amount or redemption price of any particular Series 2019E-H B onds, or portions thereof, becoming due, together with all interest accruing thereon to the due date or redemption date, and if the Commission provides for any required notice of redemption prior to maturity, such Series 2019E-H B onds (or portions thereof) will be deemed not to be Outstanding under the 1991 Master Resolution. This is referred to in this Official Statement as a "Defeasance." Upon a Defeasance of Series 2019E-H B onds (or portions thereof), the Owner or Owners of such Series 2019E-H B onds (or portions thereof) will be restricted exclusively to the money or securities so deposited, together with any earnings thereon, for payment of such Series 2019E-H B onds. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Defeasance." See also "CERTAIN RISK FACTORS-Income Taxation Risk Upon Defeasance of the Series 2019G B onds."

SECURITY FOR THE SERIES 2019E-H BONDS

Authority for Issuance

The Series 2019E-H B onds will be issued under the authority of, and in compliance with, the Charter of the City and County of San Francisco (the "Charter"), the 1991 Master Resolution, and the statutes of the State of California (the "State") as made applicable to the City pursuant to the Charter.

Pledge of Net Revenues; Source of Payment

Pledge of Net Revenues

The Series 2019E-H B onds, together with all B onds issued and to be issued pursuant to the 1991 Master Resolution, are referred to herein as the "B onds." The 1991 Master Resolution constitutes a contract between the Commission and the registered owners of the B onds under which the Commission has irrevocably pledged the Net Revenues of the Airport to the payment of the principal of and interest on the B onds. The payment of the principal and interest on the Series 2019E-H B onds will be secured by a pledge of, lien on and security interest in the Net Revenues on a parity with the pledge, lien and security interest securing all previously issued B onds and any additional B onds issued in the future under the 1991 Master Resolution. The B onds have a lien on Net Revenues senior to any other outstanding debt, and the Commission has covenanted in the 1991 Master Resolution that it will not create any pledge of, lien on, or security interest in or encumbrance on Revenues or Net Revenues except for a pledge, lien,

security interest or encumbrance subordinate to the pledge, lien and security interest granted in the 1991 Master Resolution for the benefit of the Bonds.

Net Revenues are defined in the 1991 Master Resolution as "Revenues" less "Operation and Maintenance Expenses." "Revenues," in turn, are defined in the 1991 Master Resolution to include all revenues earned by the Commission with respect to the Airport, as determined in accordance with generally accepted accounting principles ("GAAP"). Revenues do not include: (a) investment income from moneys in (i) the Construction Fund, (ii) the Debt Service Fund which constitute capitalized interest, or (iii) the Reserve Fund if and to the extent there is any deficiency therein; (b) interest income on, and any profit realized from, the investment of the proceeds of any Special Facility Bonds; (c) Special Facility Revenues and any income realized from the investment thereof unless designated as Revenues by the Commission; (d) any passenger facility or similar charge levied by or on behalf of the Commission unless designated as Revenues by the Commission; (e) grants-in-aid, donations and bequests; (f) insurance proceeds not deemed to be Revenues in accordance with GAAP; (g) the proceeds of any condemnation award; (h) the proceeds of any sale of land, buildings or equipment; and (i) any money received by or for the account of the Commission from the levy or collection of taxes upon any property of the City. The Proposed Amendments would modify the definition of "Revenues." See "Proposed Amendments to 1991 MASTER RESOLUTION."

"Operation and Maintenance Expenses" are defined in the 1991 Master Resolution to include all expenses of the Commission incurred for the operation and maintenance of the Airport, as determined in accordance with GAAP. Operation and Maintenance Expenses do not include: (a) the principal of, premium, if any, or interest on the Bonds or Subordinate Bonds (including Commercial Paper Notes); (b) any allowance for amortization, depreciation or obsolescence of the Airport; (c) any expense for which, or to the extent to which, the Commission will be paid or reimbursed from or through any source that is not included or includable as Revenues; (d) any extraordinary items arising from the early extinguishment of debt; (e) Annual Service Payments; (f) any costs, or charges made therefor, for capital additions, replacements or improvements to the Airport which, under GAAP, are properly chargeable to a capital account or reserve for depreciation; and (g) any losses from the sale, abandonment, reclassification, revaluation or other disposition of any Airport properties. Operating and Maintenance Expenses include the payment of pension charges and proportionate payments to such compensation and other insurance or outside reserve funds as the Commission may establish or the Board of Supervisors of the City (the "Board of Supervisors") may require with respect to Commission employees.

Pursuant to Section 5450 et seq. of the California Government Code, the pledge of, lien on and security interest in Net Revenues and certain other funds granted by the 1991 Master Resolution is valid and binding in accordance with the terms thereof from the time of issuance of the Series 2019E-H B onds; the Net Revenues and such other funds were immediately subject to such pledge; and such pledge constitutes a lien and security interest which immediately attaches to such Net Revenues and other funds and is effective, binding and enforceable against the Commission, its successors, creditors, and all others asserting rights therein to the extent set forth and in accordance with the terms of the 1991 Master Resolution irrespective of whether those parties have notice of such pledge and without the need for any physical delivery, recordation, filing or other further act. Such pledge, lien and security interest are not subject to the provisions of Article 9 of the California Uniform Commercial Code.

For a description of the Airport's revenues and expenses, see "AIRPORT'S FINANCIAL AND RELATED INFORMATION."

Certain Adjustments to "Revenues" and "Operation and Maintenance Expenses"

<u>PFCs as Revenues</u>. The term "Revenues" as defined in the 1991 Master Resolution does not include any passenger facility charge ("PFC") or similar charge levied by or on behalf of the Commission against passengers, unless all or a portion thereof are designated as such by the Commission by resolution. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Passenger Facility Charge."

The amounts of PFCs designated as "Revenues" under the 1991 Master Resolution and applied to pay debt service on the Bonds since Fiscal Year 2008-09 are described under "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Passenger Facility Charge." The Commission expects to continue to designate a substantial portion of PFCs as Revenues in each Fiscal Year during which such PFCs are authorized to be applied to pay debt service on the

Bonds. In the absence of such PFCs or such designation, the Airport would have to increase its rates and fees, including landing fees and terminal rental rates, and/or reduce operating expenses in the aggregate by a corresponding amount. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Passenger Facility Charge."

Offsets Against Operating Expenses. The term "Operation and Maintenance Expenses" is defined in the 1991 Master Resolution to exclude, among other things, "any expense for which, or to the extent to which, the Commission is or will be paid or reimbursed from or through any source that is not included or includable as Revenues." For example, if the Commission pays operating expenses from proceeds of borrowed money or from grant moneys rather than from current revenues, it can reduce "Operation and Maintenance Expenses" and thereby increase "Net Revenues" for purposes of satisfaction of the rate covenant and additional bonds tests under the 1991 Master Resolution. The Commission has done so in the past, but only in extraordinary circumstances.

<u>Unearned Aviation Revenues/Aviation Revenues Due.</u> Because Revenues are determined on a modified accrual basis in accordance with GAAP, actual year-to-year cash receipts from terminal rentals and landing fees may differ materially from the amounts reported as "Revenues." Terminal rental rates and landing fees are established in advance for the upcoming Fiscal Year based on estimated revenues and expenses. Actual receipts in any given Fiscal Year are either more or less than estimated revenues, as are actual costs relative to estimated costs. Due to the residual nature of the Lease and Use Agreements, to the extent there is an over-collection in any year (that is, receipts from the airlines exceed net costs), that excess is not included in "Revenues." This is due to the fact that those revenues have not yet been earned. The Commission is obligated to reduce future rates and charges by a corresponding amount. However, the cash-on-hand resulting from any such over-collection is available in the interim to pay operating expenses, debt service on B onds or other amounts in the event that Revenues are unexpectedly low or expenses are unexpectedly high in the course of a given Fiscal Year.

Conversely, if there is an under-collection in any year, that shortfall will nonetheless be recognized as "Revenues," as the Airport's right to receive them has been earned (or "accrued"). The airlines are obligated under the Lease and Use Agreements to pay such deficiency through future terminal rentals and landing fees. An under-collection signifies a corresponding reduction in liquidity available to the Airport for operating and other expenses. The Commission may also increase terminal rental rates and/or landing fees at any time during a Fiscal Year if the actual expenses (including debt service) in one or more applicable cost centers are projected to exceed by 10% or more the actual revenues from such cost center. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements."

The Commission had unearned aviation revenues (previously referred to as deferred aviation revenues) for more than ten years through Fiscal Year 2016–17. In Fiscal Year 2016–17, the Airport's cumulative unearned aviation revenues were \$54.9 million. In Fiscal Year 2017–18, the Commission had \$37.8 million in net aviation revenue due (undercollected), primarily as a result of the effect of the adoption of Governmental Accounting Standards Board Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other than Pensions ("GASB 75") on the Airport's beginning net position for Fiscal Year 2017–18. See "AIRPORT's FINANCIAL AND RELATED INFORMATION–Summary of Financial Statements – Summary of Statements of Net Position" and APPENDIX B. GASB 75 revised existing and established new actuarial and financial reporting requirements for governments that provide their employees with post-employment benefits other than pensions. The Commission projects that this aviation revenue due will be partially offset by an over-collection of Revenues for Fiscal Year 2018–19 and plans to recover the aviation revenue due over a period of up to six years (through Fiscal Year 2023–24).

Special Limited Obligations

The Series 2019E-H B onds are special, limited obligations of the Commission, payable as to principal and interest solely out of, and secured by a pledge of and lien on, the Net Revenues of the Airport and certain funds and accounts provided for in the 1991 Master Resolution. Neither the credit nor taxing power of the City is pledged to the payment of the principal of or interest on the Series 2019E-H B onds. No holder of a Series 2019E-H B ond shall have the right to compel the exercise of the taxing power of the City to pay the principal of the Series 2019E-H B onds or the interest thereon. The Commission has no taxing power whatsoever.

Rate Covenant

The Commission has covenanted in the 1991 Master Resolution that it will establish and at all times maintain rates, rentals, charges and fees for the use of the Airport and for services rendered by the Commission so that:

- (a) Net Revenues in each Fiscal Year will be at least sufficient (i) to make all required debt service payments and deposits in such Fiscal Year with respect to the Bonds, any Subordinate Bonds and any general obligation bonds issued by the City for the benefit of the Airport (there have been no such general obligation bonds outstanding for more than 30 years), and (ii) to make the Annual Service Payment to the City as described under "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City-Annual Service Payment"; and
- (b) Net Revenues, together with any Transfer from the Contingency Account to the Revenues Account, in each Fiscal Year will be at least equal to 125% of aggregate Annual Debt Service with respect to the Bonds for such Fiscal Year. See "-Contingency Account."

In the event that Net Revenues for any Fiscal Year are less than the amount specified in clause (b) above, but the Commission has promptly taken all lawful measures to revise its schedule of rentals, rates, fees and charges as necessary to increase Net Revenues, together with any Transfer, to the amount specified, such deficiency will not constitute an Event of Default under the 1991 Master Resolution. Nevertheless, if, after taking such measures, Net Revenues in the next succeeding Fiscal Year are less than the amount specified in clause (b) above, such deficiency in Net Revenues will constitute an Event of Default under the 1991 Master Resolution. See Appendix D-"Summary OF Certain Provisions of the 1991 Master Resolution—Certain Covenants—Rate Covenant."

The Proposed Amendments would modify the definitions of Revenues and Annual Debt Service. See "Proposed Amendments to 1991 Master Resolution" and Appendix H-"Summary of Proposed Amendments to 1991 Master Resolution."

Contingency Account

The 1991 Master Resolution creates a Contingency Account within the Airport Revenue Fund held by the Treasurer of the City. Moneys in the Contingency Account may be applied upon the direction of the Commission to the payment of principal, interest, purchase price or premium payments on the Bonds, payment of Operation and Maintenance Expenses, and payment of costs related to any additions, improvements, repairs, renewals or replacements to the Airport, in each case only if and to the extent that moneys otherwise available to make such payments are insufficient therefor. The Commission is not obligated to maintain a particular balance in the Contingency Account or to replenish the Contingency Account in the event any amounts are withdrawn.

As of June 30, 2019, the balance in the Contingency Account available for transfer, as described below, was approximately \$150.8 million, before accounting adjustments and excluding interest earnings. The Commission expects to make an additional deposit of \$8.0 million into the Contingency Account funded from proceeds of the Series 2019G Bonds. See "PLAN OF FINANCE AND REFUNDING" and "ESTIMATED SOURCES AND USES OF FUNDS."

The Commission has never drawn on the Contingency Account to stabilize its finances, but it has used the balance in the Contingency Account to satisfy the coverage requirements under the rate covenant described under "-Rate Covenant."

If the Commission withdraws funds from the Contingency Account for any purpose during any Fiscal Year and does not replenish the amounts withdrawn, this reduction in the amount on deposit in the Contingency Account may have an adverse effect on debt service coverage for such Fiscal Year and subsequent Fiscal Years. The Commission is not obligated to replenish the Contingency Account in the event amounts are withdrawn therefrom.

Flow of Funds

The application of Revenues is governed by relevant provisions of the Charter and of the 1991 Master Resolution. Under the Charter, the gross revenue of the Commission is to be deposited in a special fund in the City Treasury designated as the "Airport Revenue Fund." These moneys are required to be held separate and apart from all other funds of the City and are required to be applied as follows:

First, to pay Airport Operation and Maintenance Expenses;

Second, to make required payments of pension charges and to compensation, insurance and outside reserve funds therefor:

Third, to pay the principal of, interest on, and other required payments to secure revenue bonds (including the Series 2019E-H B onds);

Fourth, to pay principal of and interest on general obligation bonds of the City issued for Airport purposes (there are no general obligation bonds outstanding for Airport purposes, nor have there been for more than 30 years);

Fifth, to pay for necessary reconstruction and replacement of Airport facilities;

Sixth, to acquire real property for the construction or improvement of Airport facilities;

Seventh, to repay to the City's General Fund any sums paid from tax moneys for principal of and interest on any general obligation bonds previously issued by the City for Airport purposes; and

Eighth, for any other lawful purpose of the Commission, including without limitation transfer to the City's General Fund on an annual basis of up to 25% of the non-airline revenues as a return upon the City's investment in the Airport. However, the Lease and Use Agreements further limit payments from the Airport Revenue Fund into the General Fund of the City to the greater of (i) 15% of "Concessions Revenues" (as defined in the Lease and Use Agreements) or (ii) \$5 million per year. The Annual Service Payment to the City includes the total transfer to the City's General Fund contemplated by this Charter provision. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City."

The 1991 Master Resolution establishes the following accounts within the Airport Revenue Fund: the Revenues Account, the Operation and Maintenance Account, the Revenue Bond Account, the General Obligation Bond Account, the General Purpose Account, and the Contingency Account. Under the 1991 Master Resolution, all Revenues are required to be set aside and deposited by the Treasurer in the Revenues Account as received. Each month, moneys in the Revenues Account are set aside and applied as follows:

First: to the Operation and Maintenance Account, the amount required to pay Airport Operation and Maintenance Expenses;

Second: to the Revenue B and Account, the amount required to make all payments and deposits required in that month for the B and any Subordinate B ands, including amounts necessary to make any parity Swap Payments to a Swap Counterparty (see "AIRPORT'S FINANCIAL AND RELATED INFORMATION—Interest Rate Swaps");

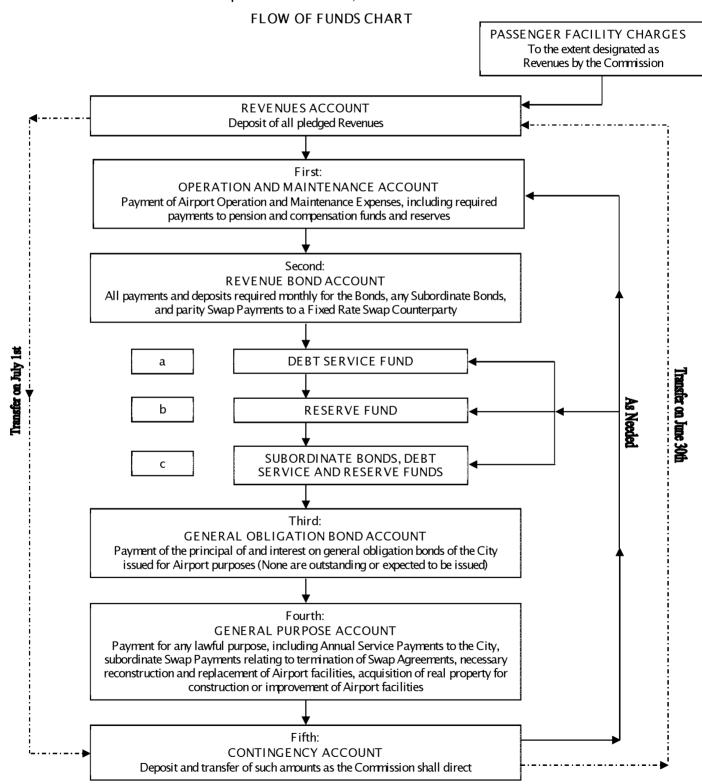
Third: to the General Obligation B and Account, the amount required to pay the principal of and interest on general obligation bonds of the City issued for Airport purposes (there are no general obligation bonds outstanding for Airport purposes, nor have there been for more than 30 years);

Fourth: to the General Purpose Account, the amount estimated to be needed to pay for any lawful purpose, including any subordinate Swap Payments payable in connection with the termination of the Swap Agreements (see "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Interest Rate Swaps"); and

Fifth: to the Contingency Account, such amount, if any, as the Commission shall direct.

Flow of Funds Chart

The Flow of Funds Chart below sets forth a simplified graphic presentation of the allocation of amounts on deposit in the Airport Revenue Fund each month as provided in both the Charter and the 1991 Master Resolution. The Commission is providing it solely for the convenience of the reader, and the Commission qualifies it in its entirety by reference to the statements under the caption "-Flow of Funds." above.



For a detailed description of the transfers and deposits of Revenues, see APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Revenue Fund: Allocation of Net Revenues."

Additional Bonds

General Requirements

Additional B onds that have a parity lien on Net Revenues with the Series 2019E-H B onds and all previously issued B onds may be issued by the Commission pursuant to the 1991 Master Resolution. The Commission has retained substantial flexibility as to the terms of any such additional B onds. Such additional B onds (which may include, without limitation, bonds, notes, bond anticipation notes, commercial paper, lease or installment purchase agreements or certificates of participation therein and Repayment Obligations to Credit Providers or Liquidity Providers) may mature on any date or dates over any period of time; bear interest at a fixed or variable rate; be payable in any currency or currencies; be in any denominations; be subject to additional events of default; have any interest and principal payment dates; be in any form (including registered, book-entry or coupon); include or exclude redemption provisions; be sold at a certain price or prices; be further secured by any separate and additional security; be subject to optional tender for purchase; and otherwise include such additional terms and provisions as the Commission may determine, subject to the then-applicable requirements and limitations imposed by the Charter.

Under the Charter, the issuance of B onds authorized by the Commission must be approved by the B oard of Supervisors.

The Commission may not issue any additional Bonds (other than refunding Bonds) under the 1991 Master Resolution unless the Trustee has been provided with either:

- (a) a certificate of an Airport Consultant stating that:
- (i) for the period, if any, from and including the first full Fiscal Year following the issuance of such additional B onds through and including the last Fiscal Year during any part of which interest on such B onds is expected to be paid from the proceeds thereof, projected Net Revenues, together with any Transfer from the Contingency Account, in each such Fiscal Year will be at least equal to 1.25 times Annual Debt Service; and
- (ii) for the period from and including the first full Fiscal Y ear following the issuance of such B onds during which no interest on such B onds is expected to be paid from the proceeds thereof through and including the later of: (A) the fifth full Fiscal Y ear following the issuance of such B onds, or (B) the third full Fiscal Y ear during which no interest on such B onds is expected to be paid from the proceeds thereof, projected Net Revenues together with any Transfer from the Contingency Account, if applicable, in each such Fiscal Y ear will be at least sufficient to satisfy the rate covenants in the 1991 Master Resolution (see "-Rate Covenant"); or
- (b) a certificate of an Independent Auditor stating that Net Revenues, together with any Transfer from the Contingency Account, in the most recently completed Fiscal Year were at least equal to 125% of the sum of (i) Annual Debt Service on the B onds in such Fiscal Year, plus (ii) Maximum Annual Debt Service on the B onds proposed to be issued.

Any Transfer from the Contingency Account taken into account for purposes of clause (a) or (b) above shall not exceed 25% of Maximum Annual Debt Service in such Fiscal Year. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Issuance of Additional Series of Bonds." The Commission anticipates that the certificate described in (a) above will be delivered by the Airport Consultant in connection with the issuance of the Series 2019E-H B onds.

Proceeds of additional Bonds are expected to be a significant source of funding for the Commission's Capital Improvement Plan. See "CERTAIN RISK FACTORS- Risks Related to the Commission's Capital Projects," "CAPITAL PROJECTS AND PLANNING-The Capital Improvement Plan" and APPENDIX A- "FINANCIAL ANALYSIS - Annual Debt Service Requirements."

The Commission may issue Bonds for the purpose of refunding any Bonds or Subordinate Bonds upon compliance with the requirements summarized above or upon delivery to the Trustee of evidence that aggregate Annual Debt Service in each Fiscal Y ear with respect to all Bonds to be Outstanding after the issuance of the refunding Bonds will be less than aggregate Annual Debt Service in each such Fiscal Y ear in which Bonds are Outstanding prior to the issuance of such refunding Bonds, and that Maximum Annual Debt Service with respect to all Bonds to be Outstanding after the issuance of the refunding Bonds will not exceed Maximum Annual Debt Service with respect to all Bonds Outstanding immediately prior to such issuance. See Appendix D-"Summary of Certain Provisions of The 1991 Master Resolution-Refunding Bonds."

The Proposed Amendments include modifications that affect the tests for issuance of additional Bonds, including refunding Bonds. See "Proposed Amendments to 1991 Master Resolution" and Appendix H-"Summary of Proposed Amendments to 1991 Master Resolution."

Repayment Obligations

Under certain circumstances, Repayment Obligations may be accorded the status of Bonds. Repayment Obligations are defined under the 1991 Master Resolution to mean an obligation under a written agreement between the Commission and a Credit Provider or Liquidity Provider to reimburse the Credit Provider or Liquidity Provider for amounts paid under or pursuant to a "Credit Facility" (which is defined in the 1991 Master Resolution to include letters of credit, lines of credit, standby bond purchase agreements, municipal bond insurance policies, surety bonds or other financial instruments) or a "Liquidity Facility" (which is defined in the 1991 Master Resolution to include lines of credit, standby bond purchase agreements or other financial instruments that obligate a third party to pay or provide funds for the payment of the purchase price of any variable rate B onds) for the payment of the principal or purchase price of and/or interest on any B onds. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Credit Facilities." See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Repayment Obligations."

Reserve Fund; Reserve Accounts; Credit Facilities

The 1991 Master Resolution established the pooled "Issue 1 Reserve Account" (the "Original Reserve Account") in the Reserve Fund as security for each series of Bonds (each, an "Original Reserve Series") that is designated as being secured by the Original Reserve Account. All of the Bonds currently Outstanding under the 1991 Master Resolution have been designated as Original Reserve Series except for the Series 2009C, 2010A, 2010D, 2017C, 2017D, 2018A, 2018B, 2018C, 2019B and 2019D Bonds. The Series 2019E-H Bonds will be designated as Original Reserve Series and will be secured by the Original Reserve Account.

The 1991 Master Resolution also established the pooled "2009 Reserve Account" (the "2009 Reserve Account") in the Reserve Fund as security for each series of B onds (each, a "2009 Reserve Series") that is designated as being secured by the 2009 Reserve Account. The Series 2009C B onds and the Series 2010D B onds are secured by the 2009 Reserve Account.

The 1991 Master Resolution also established the pooled "2017 Reserve Account" (the "2017 Reserve Account") in the Reserve Fund as security for each series of Bonds (the "2017 Reserve Series Bonds") that is designated as being secured by the 2017 Reserve Account. The Series 2017C Bonds, Series 2017D Bonds, Series 2018A Bonds, Series 2019B Bonds and Series 2019D Bonds are designated as 2017 Reserve Series Bonds.

As permitted under the 1991 Master Resolution, the Commission does not maintain a reserve account for the Series 2010A, 2018B or 2018C Bonds, all of which are secured by letters of credit.

Future series of B onds may be secured by the Original Reserve Account, the 2009 Reserve Account, the 2017 Reserve Account or a separate reserve account, or may not be secured by any debt service reserve account, as the Commission shall determine. A deficiency in any of the reserve accounts may require the Commission to apply Net Revenues to cure such deficiency and thereby reduce Net Revenues available to pay debt service on the Series 2019E – H B onds.

Original Reserve Account

The Series 2019E-H Bonds will be designated as Original Reserve Series and will be secured by the Original Reserve Account.

Amounts on deposit in the Original Reserve Account may be used solely for the purposes of (i) paying interest, principal or mandatory sinking fund payments on the Original Reserve Series B onds whenever any moneys then credited to the debt service accounts with respect to such Original Reserve Series B onds are insufficient for such purposes, and (ii) reimbursing the providers of any reserve policies or other credit facilities credited to the Original Reserve Account for any payments thereunder.

The reserve requirement for the Original Reserve Account (the "Original Reserve Requirement") is an amount equal to Aggregate Maximum Annual Debt Service. Aggregate Maximum Annual Debt Service means the maximum amount of Annual Debt Service on all Outstanding Original Reserve Series B onds in any Fiscal Y ear during the period from the date of calculation to the final scheduled maturity of such B onds. The Original Reserve Requirement can be funded with cash, Permitted Investments and or Credit Facilities.

The 1991 Master Resolution authorizes the Commission to obtain Credit Facilities, including surety bonds and insurance policies ("reserve policies"), in place of funding the Original Reserve Account with cash and Permitted Investments. The 1991 Master Resolution requires that the substitution of a Credit Facility for amounts on deposit in the Original Reserve Account will not cause the then-current ratings on the B onds to which such accounts are pledged to be downgraded or withdrawn. The 1991 Master Resolution requires that a reserve policy deposited in the Original Reserve Account must be from a credit provider rated in the highest rating category by at least two rating agencies at the time it is deposited. However, the 1991 Master Resolution does not require that those ratings be maintained after the date of deposit of such reserve policy to the Original Reserve Account. See Appendix D-"Summary of Certain Provisions of the 1991 Master Resolution-Debt Service and Reserve Funds-Application and Valuation of Issue 1 Reserve Account and 2017 Reserve Account." The Commission does not have any current plans to obtain additional Credit Facilities for the Original Reserve Account.

As of July 1, 2019, the Original Reserve Requirement was approximately \$448.8 million. The balance in the Original Reserve Account is set forth in the table below.

Original Reserve Account Balance As of July 1, 2019

Cash and Permitted Investments	\$452.2 million
National Reserve Policies ⁽¹⁾	56.9 million ⁽²⁾
TOTAL	\$509.1 million

⁽¹⁾ National Public Finance Guarantee Corporation ("National") is the reinsurer of reserve policies in the Original Reserve Account. As of July 1, 2019, Moody's Investors Service, Inc. ("Moody's") rated the claims-paying ability and financial strength of National "Baa2" (stable). Information concerning National is available in reports and statements filed by National with the SEC. This information is available on the SEC's website at http://www.sec.gov.

Following the issuance of the Series 2019E-H Bonds, the Original Reserve Requirement will be approximately \$510.8 million. The Commission expects to deposit approximately \$58.4 million from the proceeds of the Series 2019E-H Bonds and other available funds (including funds transferred from the 2009 Reserve Account) into the Original Reserve Account at the time of issuance of the Series 2019E-H Bonds. These deposits, together with investment earnings and the funds previously on deposit in the Original Reserve Account, will satisfy the Original Reserve Requirement.

^{(2) \$15.1} million of these policies expires May 1, 2020 and the remainder expires in mid-2026.

In the event that the balance in the Original Reserve Account is diminished below the Original Reserve Requirement, the Trustee is required to immediately notify the Commission of such deficiency and the Commission is required under the 1991 Master Resolution to replenish the Original Reserve Account by transfers of available Net Revenues over a period not to exceed 12 months from the date on which the Commission is notified of such deficiency. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Debt Service and Reserve Funds- Application and Valuation of Issue 1 Reserve Account and 2017 Reserve Account." Any amounts on deposit in the Original Reserve Account in excess of the Original Reserve Requirement may be withdrawn by the Commission.

The Proposed Amendments would modify the provisions relating to Credit Facilities in the Original Reserve Account and the definition of Permitted Investments. See "PROPOSED AMENDMENTS TO 1991 MASTER RESOLUTION" and Appendix H-"SUMMARY OF PROPOSED AMENDMENTS TO 1991 MASTER RESOLUTION."

2009 Reserve Account

The Series 2019E-H Bonds are NOT secured by the 2009 Reserve Account.

Amounts on deposit in the 2009 Reserve Account may be used solely for the purposes of (i) paying interest, principal or mandatory sinking fund payments on any 2009 Reserve Series B onds whenever any moneys then credited to the debt service accounts with respect to such 2009 Reserve Series B onds are insufficient for such purposes, and (ii) reimbursing the providers of any reserve policies or other credit facilities credited to the 2009 Reserve Account for any payments thereunder.

The reserve requirement for each Series of 2009 Reserve Series B onds is equal to the lesser of: (i) Maximum Annual Debt Service for such Series of 2009 Reserve Series B onds, (ii) 125% of average Annual Debt Service for such Series of 2009 Reserve Series B onds, and (iii) 10% of the outstanding principal amount of such Series of 2009 Reserve Series B onds (or allocable issue price of such Series if such Series is sold with more than a de minimis (2%) amount of original issue discount), in each case as determined from time to time. The reserve requirement for all of the 2009 Reserve Series B onds is the sum of such amounts for each individual Series (the "2009 Reserve Requirement"). The 2009 Reserve Requirement can be funded with cash, Permitted Investments and/or reserve policies, provided that no more than 40% of the 2009 Reserve Requirement may be satisfied with reserve policies. In the event of a deficiency in the 2009 Reserve Account, the Commission is required under the 1991 Master Resolution to replenish the 2009 Reserve Account from Net Revenues. See Appendix D-"Summary of Certain Provisions of the 1991 Master Resolution—Debt Service and Reserve Funds—Application and Valuation of 2009 Reserve Account."

The 1991 Master Resolution authorizes the Commission to obtain Credit Facilities, including reserve policies, in place of funding the 2009 Reserve Account with cash and Permitted Investments. The 1991 Master Resolution requires that a reserve policy deposited in the 2009 Reserve Account must be from a credit provider rated in the highest rating category by at least two rating agencies at the time it is deposited. The 1991 Master Resolution, however, does not require that those ratings be maintained after the date of deposit. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Debt Service and Reserve Funds-Application and Valuation of 2009 Reserve Account."

As of July 1, 2019, the 2009 Reserve Requirement was approximately \$5.1 million and approximately \$20.2 million of cash and Permitted Investments was held in the 2009 Reserve Account. Approximately \$11.9 million from the 2009 Reserve Account is expected to be transferred to the Original Reserve Account at the time of issuance of the Series 2019E-H B onds.

2017 Reserve Account

The Series 2019E-H Bonds are NOT secured by the 2017 Reserve Account.

Amounts on deposit in the 2017 Reserve Account may be used solely for the purposes of (i) paying interest, principal or mandatory sinking fund payments on any 2017 Reserve Series B onds whenever any moneys then credited to the debt service accounts with respect to such 2017 Reserve Series B onds are insufficient for such purposes, and (ii) reimbursing the providers of any reserve policies or other credit facilities credited to the 2017 Reserve Account for any payments thereunder.

The reserve requirement for the 2017 Reserve Account (the "2017 Reserve Requirement") is equal to the lesser of: (i) 2017 Reserve Account Maximum Annual Debt Service (the maximum amount of aggregate Annual Debt Service for all 2017 Reserve Series B onds in any Fiscal Year during the period from the date of calculation to the final scheduled maturity of the 2017 Reserve Series B onds), (b) 10% of the outstanding aggregate principal amount of all 2017 Reserve Series B onds (provided that the issue price of a Series of 2017 Reserve Series B onds will be used in this calculation if such Series was sold with an original issue discount that exceeded 2% of the principal of such Series on its original date of sale), and (c) 125% of the average aggregate Annual Debt Service for all 2017 Reserve Series B onds. The 2017 Reserve Requirement can be funded with cash, Permitted Investments and/or Credit Facilities.

In the event of a deficiency in the 2017 Reserve Account, the Commission is required under the 1991 Master Resolution to replenish the 2017 Reserve Account from Net Revenues. Any amounts on deposit in the 2017 Reserve Account in excess of the 2017 Reserve Requirement may be withdrawn by the Commission. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Debt Service and Reserve Funds-Application and Valuation of Issue 1 Reserve Account and 2017 Reserve Account."

The 1991 Master Resolution authorizes the Commission to obtain credit facilities, including reserve policies, in place of funding the 2017 Reserve Account with cash and permitted investments. The 1991 Master Resolution requires that a reserve policy deposited in the 2017 Reserve Account must be from a credit provider rated in the highest rating category by at least two rating agencies at the time it is deposited. The 1991 Master Resolution, however, does not require that those ratings be maintained after the date of deposit. See Appendix D-"Summary of Certain Provisions of the 1991 Master Resolution—Debt Service and Reserve Funds—Application and Valuation of Issue 1 Reserve Account and 2017 Reserve Account."

As of July 1, 2019, the 2017 Reserve Requirement was approximately \$49.7 million and approximately \$52.6 million of cash and Permitted Investments was held in the 2017 Reserve Account.

Contingent Payment Obligations

The Commission has entered into, and may in the future enter into, contracts and agreements in the course of its business that include an obligation on the part of the Commission to make payments contingent upon the occurrence or non-occurrence of certain future events, including events that are beyond the direct control of the Commission. These agreements include interest rate swaps and other similar agreements, investment agreements, including for the future delivery of specified securities, letter of credit and line of credit agreements for advances of funds to the Commission in connection with its B onds and other obligations, and other agreements. See "-Other Indebtedness-Subordinate Bonds" and "AIRPORT'S FINANCIAL AND RELATED INFORMATION— Credit Facilities" for information about the Commission's existing letters of credit. For summaries of the Interest Rate Swap Policy and certain swap agreements entered into by the Commission, see "AIRPORT'S FINANCIAL AND RELATED INFORMATION—Interest Rate Swaps."

Such contracts and agreements may provide for contingent payments that may be conditioned upon the credit ratings of the Airport and/or of the other parties to the contract or agreement, maintenance by the Commission of specified financial ratios, the inability of the Commission to obtain long-term refinancing for short-term obligations or liquidity arrangements, and other factors. Such payments may be payable on a parity with debt service on the B onds, including any "Swap Payments" to a Swap Counterparty as such term is defined in the 1991 Master Resolution.

The amount of any such contingent payment may be substantial. To the extent that the Commission does not have sufficient funds on hand to make any such payment, it is likely that the Commission would seek to borrow such amounts through the issuance of additional B onds or Subordinate B onds (including Commercial Paper Notes).

No Acceleration

The B onds are not subject to acceleration under any circumstances or for any reason, including without limitation upon the occurrence and continuance of an Event of Default under the 1991 Master Resolution. Moreover, the B onds will not be subject to mandatory redemption or mandatory purchase or tender for purchase upon the occurrence and continuance of an Event of Default under the 1991 Master Resolution to the extent the redemption or purchase price is payable from Net Revenues. B onds, however, may be subject to mandatory redemption or mandatory purchase or tender for purchase if the redemption or purchase price is payable from a source other than Net Revenues such as payments under a credit facility or liquidity facility. Amounts payable to reimburse a credit provider or

liquidity provider pursuant to a credit facility or liquidity facility for amounts drawn thereunder to pay principal, interest or purchase price of Bonds, which reimbursement obligations are accorded the status of Repayment Obligations, can be subject to acceleration, but any such accelerated payments (other than certain amounts assumed to be amortized in that year under the 1991 Master Resolution) would be made from Net Revenues on a basis subordinate to the Bonds. See APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Repayment Obligations."

Upon the occurrence and continuance of an Event of Default under the 1991 Master Resolution, the Commission would be liable only for principal and interest payments on the B onds as they became due. The inability to accelerate the Bonds limits the remedies available to the Trustee and the Owners upon an Event of Default and could give rise to conflicting interests among Owners of earlier-maturing and later-maturing Bonds. In the event of successive defaults in payment of the principal of or interest on the B onds, the Trustee likely would be required to seek a separate judgment for each such payment not made. Also see "CERTAIN RISK FACTORS- Limitation of Remedies" and "-Potential Effect of a City B ankruptcy."

Other Indebtedness

General

In addition to the Series 2019E-H B onds and the other B onds that it may have Outstanding from time to time, the Commission has reserved the right under the 1991 Master Resolution to issue indebtedness (i) secured in whole or in part by a pledge of and lien on Net Revenues subordinate to the pledge and lien securing the B onds ("Subordinate B onds"), or (ii) secured by revenues from a Special Facility (defined herein) ("Special Facility B onds"). Provisions of the 1991 Master Resolution governing the issuance of and security for Subordinate B onds and Special Facility B onds are described below under "-Subordinate Bonds" and "-Special Facility Bonds" and in APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Subordinate B onds" and "-Special Facility B onds."

Subordinate Bonds

The Commission has authorized, and the B oard of Supervisors has approved, the issuance by the Commission of up to \$500,000,000 principal amount outstanding at any one time of commercial paper notes (the "Commercial Paper Notes"), which constitute Subordinate B onds. The Commercial Paper Notes are authorized pursuant to Resolution No. 97-0146 adopted by the Commission on May 20, 1997, as amended and supplemented (the "Subordinate Resolution"). The terms and provisions of the Subordinate Resolution are substantially similar to those of the 1991 Master Resolution, with the exception that the Subordinate Resolution provides that payment of the Commercial Paper Notes, and repayment of amounts drawn on the letters of credit with respect thereto, are secured by a lien on Net Revenues subordinate to the lien of the 1991 Master Resolution securing the B onds. See "-Contingent Payment Obligations" and APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION—Subordinate B onds."

The Commission has obtained four irrevocable direct-pay letters of credit totaling \$500 million in available principal amount to support the Commercial Paper Notes. These letters of credit are described in the following table.

[Remainder of Page Intentionally Left Blank]

LETTERS OF CREDIT FOR COMMERCIAL PAPER NOTES

	Series A-1 Notes, Series B-1 Notes, Series C-1 Notes	Series A-2 Notes, Series B-2 Notes, Series C-2 Notes	Series A-3 Notes, Series B-3 Notes, Series C-3 Notes	Series A-4 Notes, Series B-4 Notes, Series C-4 Notes
Principal Amount	\$100,000,000	\$100,000,000	\$200,000,000	\$100,000,000
Expiration Date	May 2, 2024	June 21, 2022	May 1, 2020	November 15, 2023
Credit Provider	State Street ⁽¹⁾	Sumitomo Mitsui Banking ⁽²⁾	Royal Bank of Canada ⁽³⁾	U.S. Bank ⁽⁴⁾
Credit Provider Ratings ⁽⁵⁾				
Short-Term	P-1/A-1+/F1+	P-1/A-1/F1	P-1/A-1+/F1+	P-1/A-1/F1+
Long-Term	Aa3/AA-/AA	A1/A/A	A2/AA-/AA	Aa2/A+/AA-

⁽¹⁾ State Street Bank and Trust Company.

Source: Commission.

As of July 30, 2019, there were approximately \$23.0 million of Commercial Paper Notes outstanding. The Commission issued additional Commercial Paper Notes to make the swap termination payments and a portion of the deposit to the Contingency Account described under "PLAN OF FINANCE AND REFUNDING-Deposit to Contingency Account" and "-Refunding Plan for Refunded B onds." The Commission expects to repay approximately \$19.4 million of Commercial Paper Notes, plus those issued to make such swap termination payments and Contingency Account deposit, with a portion of the proceeds of the Series 2019E B onds, Series 2019F B onds and Series 2019G B onds. The Commission expects to continue issuing and repaying Commercial Paper Notes from time to time in the future, and may issue further additional Commercial Paper Notes prior to the issuance of the Series 2019E-H B onds.

Special Facility Bonds

The Commission may (a) designate an existing or planned facility, structure, equipment or other property, real or personal, which is at the Airport or part of any facility or structure at the Airport as a Special Facility, (b) provide that revenues earned by the Commission from or with respect to such Special Facility shall constitute "Special Facility Revenues" and shall not be included as Revenues, and (c) issue Special Facility B onds for the purpose of acquiring, constructing, renovating, or improving such Special Facility. The designation of an existing facility as a Special Facility therefore could result in a reduction in Revenues. Principal, purchase price, if any, redemption premium, if any, and interest with respect to Special Facility B onds shall be payable from and secured by the Special Facility Revenues, and not from or by Net Revenues.

No Special Facility Bonds may be issued by the Commission unless an Airport Consultant has certified: (i) that the estimated Special Facility Revenues with respect to the proposed Special Facility will be at least sufficient to pay the principal, purchase price, interest, and all sinking fund, reserve fund and other payments required with respect to such Special Facility Bonds when due, and to pay all costs of operating and maintaining the Special Facility not paid by a party other than the Commission; (ii) that estimated Net Revenues calculated without including the Special Facility Revenues and without including any operation and maintenance expenses of the Special Facility as Operation and Maintenance Expenses will be sufficient so that the Commission will be in compliance with its rate covenant during each of the five Fiscal Years immediately following the issuance of the Special Facility Bonds; and (iii) that no Event of Default under the 1991 Master Resolution exists.

⁽²⁾ Sumitomo Mitsui Banking Corporation, acting through its New York Branch.

⁽³⁾ Royal Bank of Canada, acting through a branch located at 200 Vesey Street, New York, New York.

⁽⁴⁾ U.S. Bank National Association.

⁽⁵⁾ As of July 1, 2019. Ratings are provided for convenience of reference only. Such rating information has been obtained from sources believed to be reliable but has not been confirmed or re-verified by the rating agencies. The Commission does not take any responsibility for the accuracy of such ratings, nor does it give any assurance that such ratings will apply for any given period of time or that such ratings will not be revised downward or withdrawn if, in the judgment of the agency providing such rating, circumstances so warrant. The rating information reflects the ratings of the credit provider's obligations, not the rating on the related Commercial Paper Notes; ratings on related Commercial Paper Notes; may be different. Ratings for the Credit Providers' obligations are displayed as Moody's JS&P/Fitch. The Long-Term ratings provided are Moody's Issuer Rating, S&P's Long-Term Local Issuer Credit Rating and Fitch's Long-Term Issuer Default Rating. The Short-Term ratings provided are Moody's Short-Term Rating, S&P's Short-Term Local Issuer Credit Rating and Fitch's Short-Term Issuer Default Rating. None of the above-referenced credit providers has provided any information for inclusion in this Official Statement or independently verified or reviewed, made any representation regarding, or accepted any responsibility for the accuracy or completeness of this Official Statement.

SFO Fuel Bonds

The Commission issued \$125,000,000 of Special Facilities Lease Revenue Bonds (SFO FUEL COMPANY LLC) Series 2019A and Series 2019B (the "SFO Fuel Bonds"), which are Special Facility Bonds, in February 2019. The initial principal amount of these Special Facility Bonds remains outstanding. The SFO Fuel Bonds were issued to finance and refinance (including through the refunding of Special Facility Bonds issued in 1997 and 2000) construction of jet fuel storage, distribution and related facilities at the Airport for the benefit of the airlines. See "SAN FRANCISCO INTERNATIONAL AIRPORT—Current Airport Facilities—Jet Fuel Distribution System." The SFO Fuel Bonds are payable from and secured by payments made by SFO FUEL COMPANY LLC, a special purpose limited liability company ("SFO Fuel"), pursuant to a lease agreement between the Commission and SFO Fuel with respect to the jet fuel storage and distribution facilities. SFO Fuel was formed by certain airlines operating at the Airport. The lease payments, and therefore the SFO Fuel B onds, are payable from charges imposed by SFO Fuel on air carriers for into-plane fueling at the Airport, and are not payable from or secured by Net Revenues.

Airport Hotel Special Facility Revenue Bonds

In June 2018, the Commission issued \$260 million of San Francisco International Airport Hotel Special Facility Revenue B onds (the "Hotel Special Facility B onds") to finance and refinance (through the repayment of Commercial Paper Notes) the development and construction of a new Commission-owned hotel to be located at the Airport (the "On-Airport Hotel"), to fund capitalized interest on the Hotel Special Facility B onds and to pay related costs. The On-Airport Hotel was designated as a Special Facility, and the Hotel Special Facility B onds are Special Facility B onds. The Hotel Special Facility B onds amortize over 40 years and bear interest at a rate of 3.0% per annum. The Hotel Special Facility B onds are payable from On-Airport Hotel revenues. There are \$260 million of the Hotel Special Facility B onds outstanding as of July 1, 2019. The On-Airport Hotel is expected to be managed as a Grand Hyatt in accordance with a long-term management agreement between the Commission and Hyatt Corporation and is expected to be a four-star hotel with 351 rooms. Construction of the On-Airport Hotel commenced in June 2017, and the hotel is expected to open in late September 2019. See "CAPITAL PROJECTS AND PLANNING—The Capital Improvement Plan." The Hotel Special Facility B onds were purchased by the Commission with the proceeds of its Second Series Revenue B onds, Series 2018B and Series 2018C.

Rights of Bond Insurers

The Commission has municipal bond insurance policies with respect to less than one percent of its B onds. The 1991 Master Resolution provides such insurers with various affirmative rights in connection with the B onds which they insure. For a description of such rights, see APPENDIX D-"SUMMARY OF CERTAIN PROVISIONS OF THE 1991 MASTER RESOLUTION-Certain Rights of B ond Insurers."

CERTAIN RISK FACTORS

This section provides a general overview of certain risk factors which should be considered, in addition to the other matters set forth in this Official Statement, in evaluating an investment in the Series 2019E-H Bonds. This section is not meant to be a comprehensive or definitive discussion of the risks associated with an investment in the Series 2019E-H Bonds, and the order in which this information is presented does not necessarily reflect the relative importance of various risks. Potential investors in the Series 2019E-H Bonds are advised to consider the following factors, among others, and to review this entire Official Statement, including all of the Appendices hereto, to obtain information essential to the making of an informed investment decision. Any one or more of the risk factors discussed below, among others, could adversely affect the financial condition of the Airport or its ability to make scheduled payments on the Series 2019E-H Bonds. There can be no assurance that other risk factors not discussed herein will not become material in the future.

Local Economy

The economy of the San Francisco B ay Area is a major factor affecting long-term airline traffic at the Airport. Generally, regions such as the San Francisco B ay Area with large populations, high levels of employment, and high average per capita incomes will generate a high demand for airline travel. In Fiscal Year 2018–19, an estimated 81% of the passenger traffic at the Airport is "origin and destination" traffic, which means that the passenger traffic represents either the origin or ultimate destination of a passenger's air travel; the remaining 19% were connecting passengers. The demographics and economy of a region—as measured by changes in population, employment, and

per capita income—as well as airline service and airfares—are typically the most important factors affecting origin and destination passenger demand. The strength of the origin and destination traffic at the Airport primarily depends on the strength of the San Francisco B ay Area economy and the economic linkages between and among the regional, national, and global economies. In particular, the growth of passenger traffic at the Airport over the last ten years has been significantly supported by its growing population, well-educated work force, high per capita income, diverse local economy, popularity as a domestic and international tourist destination, and its strong competitive position in industries such as information technology and software, social and digital media, life science and biotechnology, environmental and clean technology, professional services, and international business. If economic growth in the San Francisco B ay Area slows or declines, the demand for passenger traffic at the Airport may be reduced and Airport Revenues may be substantially impacted. See APPENDIX A—"REPORT OF THE AIRPORT CONSULTANT."

Uncertainties of the Aviation Industry

Demand for Air Travel

The Airport's Revenues depend significantly on the level of aviation activity and passenger traffic at the Airport. The principal determinants of passenger demand at the Airport include the population and economy of the Airport service region; national and international economic conditions, including imposition of tariffs; political conditions, including wars, other hostilities and acts of terrorism; airfares and competition from surrounding airports; airline service and route networks; the capacity of the national air transportation system and the Airport; accidents involving commercial passenger aircraft; visa requirements and other limitations on the ability of foreign citizens to enter the United States; currency exchange rates; and the occurrence of pandemics and other natural and man-made disasters. Airfares and airline service are, in turn, affected by the financial condition of the airlines and regulatory requirements imposed on airlines, among other factors. See "-B ankruptcy of Airlines Operating at the Airport" and "-Competition" and "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements-Potential Effects of an Airline Bankruptcy."

Financial Condition of the Airlines

The airline industry is cyclical and subject to competition and variable demand. Traffic volumes are responsive to economic circumstances and seasonal patterns. Other factors, such as fuel and regulatory costs, can also have a significant effect on the industry. As a result, airline financial performance can fluctuate dramatically from one reporting period to the next. The ability of the Commission to derive revenues from its operations depends largely upon the financial health of the airlines serving the Airport and the airline industry as a whole. The financial results of the airline industry are subject to substantial volatility and, at times, many carriers have had overlapping, extended periods of unprofitability.

Fuel is a significant cost component of airline operations and continues to be an important and uncertain determinant of an air carrier's operating economics. Historically, aviation fuel prices have been particularly sensitive to worldwide political instability. Continued or new hostilities in petroleum producing regions or affecting key shipping lanes could dramatically increase the price and adversely affect the availability of aviation fuel. Economic expansion in emerging markets also contributes to higher aviation fuel prices. Natural disasters affecting refineries may also result in higher aviation fuel prices. See "AIRLINE TRAFFIC AND ECONOMIC ANALYSIS—Key Factors Affecting Future Airline Traffic—Availability and Price of Aviation Fuel" in APPENDIX A. Significant and prolonged increases in the cost of aviation fuel have had and are likely in the future to have an adverse effect on the air transportation industry by increasing airline operating costs and reducing airline profitability.

Airport Security

Acts of terrorism or other major breaches of security at the Airport can result in a decline in passenger traffic at the Airport which can materially adversely impact Airport Revenues. The September 11, 2001 terrorist attacks resulted in increased safety and security measures at the Airport mandated by the Aviation and Transportation Security Act passed by the U.S. Congress in November 2001 and by directives of the Federal Aviation Administration ("FAA"). In addition, certain safety and security operations at the Airport have been assumed by the Transportation Security Administration. In spite of the increased security measures, additional acts of terrorism resulting in disruption to the North American air traffic system, increased passenger and flight delays, damage to the Airport, reductions in Airport passenger traffic and/or reductions in Airport Revenues, remain possible. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Airport Security." The Airport maintains liability insurance coverage for war perils including but not limited

to terrorism and hijacking, with \$250 million in coverage. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Risk Management and Insurance." It is possible that liability could exceed coverage or otherwise not be covered.

Worldwide Health Concerns

Worldwide health concerns can lead to significant declines in passenger traffic at the Airport. Travel restrictions, as well as other public health measures, may be imposed to limit the spread of communicable diseases which may arise. In spring 2003, there was an outbreak of a serious strain of bird influenza or "flu" in Asia and Canada called "Severe Acute Respiratory Syndrome" or SARS. That, together with the outbreak of the war in Iraq and other factors at about the same time, resulted in a temporary but significant decline in passenger activity at the Airport of approximately 14% in the second quarter of Fiscal Year 2002-03, and approximately 7% for the year as a whole. In fall 2009, the World Health Organization and the U.S. Department of Health and Human Services (through the Secretary of the Department of Homeland Security) declared public health emergencies as the result of outbreaks of a serious strain of H1N1 flu. Future outbreaks or pandemics may lead to a decrease in air traffic, at least for a temporary period, which in turn could cause a decrease in passenger activity at the Airport and a corresponding decline in Revenues.

Limitations on Additional Liquidity

The Lease and Use Agreements that the Airport has entered into with each of the airlines serving the Airport limits the amount of reserves that the Airport may establish. The current Lease and Use Agreements provide for a residual rate setting methodology at the Airport, which requires the Airport to match revenues and expenditures when it sets its rates and charges. Any excess revenues collected in a given Fiscal Year are used to offset costs in a future Fiscal Year, as discussed above under "Security for the Series 2019e-H Bonds-Pledge of Net Revenues; Source of Payment-Certain Adjustments to 'Revenues' and 'Operation and Maintenance Expenses'-Unearned Aviation Revenues/Aviation Revenues Due." The Lease and Use Agreements provide for a mid-year rate adjustment if the Airport's actual expenses for any year are projected to exceed actual revenues for that year by 10 percent. But the Lease and Use Agreements do not permit the Airport to set rates and charges to establish reserves in excess of those required by the 1991 Master Resolution. See Appendix E-"Summary of Certain Provisions of the Lease And Use Agreements."

Bankruptcy of Airlines Operating at the Airport

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

Also, under the Bankruptcy Code, any rejection of a Lease and Use Agreement could result in the Commission holding a claim for rents and other items that would have accrued in the future, which claim would rank as that of claims held by general unsecured creditors of the airline, in addition to pre-bankruptcy amounts owed. For further discussion of the impact of an airline bankruptcy, see "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements-Potential Effects of an Airline Bankruptcy."

The Commission's capital projects increase the Commission's overall long-term debt.

The Commission's current Capital Improvement Plan includes an aggregate of \$3.6 billion of future spending on projects through Fiscal Year 2023–24. The Report of the Airport Consultant attached as APPENDIX A hereto reflects the projected issuance of approximately \$2.8 billion of additional B onds (subsequent to the issuance of the Series 2019E-H B onds) between Fiscal Years 2019–20 and Fiscal Year 2022–23, including approximately \$916 million of additional B onds in Fiscal Year 2019–20, to finance projects in the Capital Improvement Plan and to fund additional deposits to the Contingency Account. The Commission expects that it will experience an aggregate increase in debt service costs when it issues additional B onds, which will increase landing fees and terminal rents at the Airport, thereby increasing the costs of the airlines serving the Airport, possibly making the Airport less competitive. The timing and amounts of additional B onds may change depending on passenger and cargo demand, the availability of other funding sources, the timing of capital expenditures and market conditions. The Commission also may undertake additional capital projects during the period covered by the Capital Improvement Plan that are not presently included in the Capital Improvement Plan and expects that it will undertake other major capital projects following the completion of the current Capital Improvement Plan.

If the Commission is unable to finance and complete major capital projects, the Commission may be unable to provide critical improvements to aging infrastructure or meet regulatory requirements.

If the Commission is unable to undertake critical capital projects, then the condition of Airport facilities may decline, which can impact customer experience, airline satisfaction, and operational efficiency and effectiveness. In addition, the Airport may be required to undertake some capital projects to comply with regulatory requirements or to preserve the overall viability of the Airport.

The Commission's capital projects may be delayed or over budget.

Although the Commission uses a variety of strategies to mitigate risk associated with the implementation of its capital projects, project development could be delayed, and the cost of completing projects included in the Capital Improvement Plan could be higher than expected due to various factors that are outside of the control of the Commission, including but not limited to economic conditions; natural or manmade disasters; events such as the September 11, 2001 terrorist attacks; new or ongoing military hostilities; unexpected issues with integration into existing facilities; the inability to obtain, or delays in obtaining, regulatory approvals; the inability to comply with the conditions of regulatory approvals; changes in laws or regulations; inability to obtain, or delays in obtaining, federal approvals or federal funding; labor, bidding and contracting requirements; delays caused by the airline review process (see "SAN FRANCISCO INTERNATIONAL AIRPORT—Airline Agreements—Lease and Use Agreements—Airline Review of Capital Improvements"); weather; litigation; tariffs; cost overruns; casualty; strikes; unanticipated engineering, environmental or geological problems; shortages or increased costs of materials or labor; and financial difficulties of contractors. In addition, it is possible that funding sources such as federal grants may not be available as expected. If costs are higher than projected or funds are not available to finance the projects, the Commission may have to delay or cancel projects and/or incur additional debt. Some of the capital projects of the Commission are essential to the Commission's ability to generate Airport revenues.

Competition

Metropolitan Oakland International Airport (the "Oakland Airport") and Norman Y. Mineta San Jose International Airport (the "San Jose Airport") are the other airports in the San Francisco B ay Area that compete with the Airport for passengers and cargo traffic. In addition, the Airport competes with other West Coast airports, primarily Los Angeles International Airport (the "Los Angeles Airport") and Seattle-Tacoma International Airport (the "Seattle Airport"), for international passengers. Competition from these airports may affect passenger and cargo demand at the Airport. See "San Francisco International Airport Competition."

The California High-Speed Rail Authority (the "High-Speed Rail Authority") is in the process of planning and constructing a high speed train service linking Southern California, the Sacramento San Joaquin Valley and the San Francisco B ay Area. The regional Metropolitan Transportation Commission retained an aviation consulting firm to study the likely effect of high-speed rail on the airports in the San Francisco B ay Area. The consulting firm released a report in 2010 forecasting that by 2035, the San Jose Airport could lose 12% of its projected passengers, Oakland

Airport could lose 9% and the Airport could lose 4% to a high-speed rail system. While passenger traffic at all three B ay Area airports has changed since 2010, there could be reductions in passenger traffic as a result of the high-speed rail system. The Commission is unable to predict when or whether a high-speed rail system will be completed, what areas of the State it will serve, or the effect that any such high-speed rail system would have on passenger traffic at and revenues of the Airport.

Uncertainties of Projections, Forecasts and Assumptions

In its Report, the Airport Consultant, based on the assumptions contained in the Report, forecasts that the projected Revenues of the Commission will be sufficient to allow the Commission to comply with the rate covenant in the 1991 Master Resolution through June 30, 2026. See APPENDIX A-"REPORT OF THE AIRPORT CONSULTANT." One of the principal assumptions upon which the Airport Consultant relies in making its forecast is that passenger traffic will increase as a function of growth in the economy of the region served by the Airport and continued airline competition. Whether the forecasted passenger traffic materializes depends on a number of factors outside of the Commission's control, such as economic growth of the United States and the San Francisco Bay Area, airline financial condition, general costs of air travel, capacity of the national air traffic control system, operational decisions made by airlines, and other similar assumptions. In addition, the Airport Consultant makes numerous other assumptions as described in their Report. The Report should be read in its entirety for an understanding of the forecasts and the underlying assumptions. As noted in the Report of the Airport Consultant, any financial forecast is subject to uncertainties.

Forecast financial information for the On-Airport Hotel (including forecast revenues and expenses associated with the operation of the On-Airport Hotel) are based upon assumptions made by Jones Lang LaSalle Inc. ("JLL"), the Commission's hotel consultant, and are not assumptions made by the Airport Consultant. The On-Airport Hotel financial forecast is documented in the report titled: "Hotel Market and Underwriting Study: Grand Hyatt at SFO", dated May 2, 2018, which was prepared by JLL (the "Hotel Study"). The Hotel Study was prepared solely for use by the Commission, is not incorporated in this Official Statement by reference, and investors are not permitted to rely upon the Hotel Study in making a decision whether to purchase the Series 2019E-H B onds. The Hotel Study represents an opinion of the On-Airport Hotel's projected financial performance over an assumed ten-year holding period, including forecasts of net income and is based on numerous assumptions. The Hotel Study is subject to many limitations and does not provide any form of assurance with respect to any of the information discussed or referred to therein. Any reader or recipient of the Hotel Study is deemed to understand and accept the scope and limitations of the Hotel Study.

The Hotel Study assumes no impending economic downturn and continued growth of the national economy during the forecast period. It also assumes that the On-Airport Hotel will be completed and open for business as scheduled, in the planned form, and that it will operate as a Grand Hyatt hotel under responsible ownership and competent property management. The Hotel Study assumes allocation of costs and responsibilities between the Commission and the operator consistent with the terms of the Hotel Management Agreement related to the On-Airport Hotel. The Hotel Study assumes an average inflation rate for operating costs of 2.9 percent, as provided by the California Economic Forecast. The Hotel Study assumes that the On-Airport Hotel remains the only full-service luxury hotel expected to enter the direct competitive set in the foreseeable future and that passenger traffic at the Airport will increase consistent with the assumptions in the report of the Airport Consultant. Legal, regulatory and zoning compliance are assumed. Actual results may vary from those forecast in the Hotel Study. JLL assumes no responsibility for economic factors that may affect or alter the forecast opinions in the Hotel Study if those economic factors were not present as of the date of the Hotel Study. The Hotel Study was prepared in connection with the issuance of the Hotel Special Facility B onds in June 2018 and has not been updated since May 2, 2018.

Inevitably, some assumptions used to develop the forecasts will not be realized, and unanticipated events and circumstances may occur. The actual financial results achieved will vary from those forecasts, and the variations may be material. Also see "REPORT OF THE AIRPORT CONSULTANT" and APPENDIX A.

Technological Innovations

New technologies and innovative business strategies in established markets are likely to be developed in the future. For example, transportation network companies ("TNCs"), such as Uber Technologies Inc., Lyft, Inc. and Tickengo, Inc. d/b/a Wingz have become increasingly popular in recent years, resulting in shifts in the relative share of non-airline revenues from various ground transportation activities and operational issues such as increased curbside

congestion. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Ground Transportation Revenues" and Table 23 under "FINANCIAL ANALYSIS-Revenues-Nonairline Revenues" in APPENDIX A. While the Commission makes every effort to anticipate changes resulting from new technologies and innovative business strategies and to minimize negative impacts on revenues, if any, there may be times when the Commission's expectations differ from actual outcomes. In such event, revenues could be lower than expected and additional capital or operating expenses might be incurred.

Seismic and Other Natural Disasters or Emergencies

The Airport is located in a seismically active region. Active earthquake faults underlie both the City and the surrounding San Francisco B ay Area, including the San Andreas Fault, which passes within about three miles of the City's border, and the Hayward Fault, which runs under Oakland, B erkeley and other cities on the east side of San Francisco B ay. Significant seismic events include the 1989 Loma Prieta earthquake, centered about 50 miles south of the Airport, which registered 6.9 on the Richter scale of earthquake intensity. That earthquake caused fires, building collapses, and structural damage to buildings and highways in the City and surrounding areas. The San Francisco-Oakland B ay B ridge, the only east-west vehicle access into the City, was closed for a month for repairs, and several highways in the City were permanently closed and eventually removed. There was no damage to the runways and no material structural damage to the terminal buildings at the Airport, and the Airport was fully operational within twelve hours of the event. On August 24, 2014, the San Francisco B ay Area experienced a 6.0 earthquake centered near Napa along the West Napa Fault. Neither the City nor the Airport suffered any material damage as a result of this earthquake. The effects of future seismic events may vary from the effects of past seismic events.

In March 2015, the Working Group on California Earthquake Probabilities (a collaborative effort of the U.S. Geological Survey (U.S.G.S.), the California Geological Survey, and the Southern California Earthquake Center) reported that there is a 72% chance that one or more earthquakes of about magnitude 6.7 or larger will occur in the San Francisco B ay Area before the year 2045. Earthquakes may be very destructive. The U.S.G.S. released a report in April 2017 entitled The HayWired Earthquake Scenario, which estimates that property damage and direct business disruption losses from a magnitude 7.0 earthquake on the Hayward Fault would be more than \$82 billion (in 2016 dollars).

The Commission has made and continues to make upgrades to the seismic stability of some of its facilities. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Current Airport Facilities-Seismic Design of Airport Facilities." Nevertheless, the Airport could sustain extensive damage to its facilities in a major earthquake from ground motion and possible liquefaction of underlying soils and resulting tidal surges. Damage could include pavement displacement (which could, in the worst case, necessitate the closing of one or more runways for extended periods of time), distortions of pavement grades, breaks in utilities, loss of water supply from the City's Hetch Hetchy water system, damage to drainage and sewage lines, displacement or collapse of buildings, rupture of gas and fuel lines (including the common carrier pipelines under the San Francisco B ay that supply jet fuel to the Airport and Pacific Gas & Electric lines under Airport property), and collapse of dikes at the Airport with consequential flooding.

Further, the Airport could sustain damage as a result of other events, such as terrorist attacks, extreme weather events and other natural occurrences, fires and explosions, spills of hazardous substances, strikes and lockouts, sabotage, wars, blockades, and riots. Also see "-Airport Security" and "-Risks Associated with Global Climate Change."

While the Commission has attempted to address the risk of loss through the purchase of insurance, certain of these events may not be covered. In particular, the Commission does not maintain insurance or self-insure against any risks due to land movement or seismic activity, and in some instances other events may not be covered. See "-Airport Security" and "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Risk Management and Insurance." Further, even for events that are covered by insurance, the Commission cannot guarantee that coverage will be sufficient or that insurers will pay claims in a timely manner. From time to time, the Commission may change the types of and limits and deductibles on the insurance coverage that it carries.

Furthermore, a major earthquake anywhere in the San Francisco B ay Area may cause significant temporary and possibly long-term harm to the economy of one or more San Francisco B ay Area cities or the entire region, which could in turn have a negative effect on passenger traffic and on Revenues, and such effect could be material.

Risks Associated with Global Climate Change

Numerous scientific studies on global climate change show that, among other effects on the global ecosystem, sea levels will rise, extreme temperatures will become more common and extreme weather events will become more frequent and more intense as a result of increasing global temperatures attributable to atmospheric pollution. Airport operations are potentially vulnerable to effects of sea level rise, extreme climate conditions, and extreme weather events, and significant capital investments will likely be made to address these vulnerabilities. Further, the long-term effects of sea level rise and climate change could reduce demand for travel to or from the San Francisco B ay Area, with potential material adverse effects on the Airport's finances.

The Fourth National Climate Assessment, published by the U.S. Global Change Research Program in November 2018 (NCA4), finds that rising temperatures, sea level rise, and more frequent and intense extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to increasingly disrupt and damage infrastructure, ecosystems, social systems, property, and regional economies and industries that depend on natural resources and favorable climate conditions. NCA4 also finds that the Airport is vulnerable to effects of sea level rise, with flooding potentially exacerbated by storm surges and high tides.

Between 1854 and 2016, sea level rose about nine inches according to the tidal gauge at Fort Point, underneath the Golden Gate Bridge. Sea levels will continue to rise in the future due to the increasing temperature of the oceans causing thermal expansion and growing ocean volume from glaciers and ice caps melting into the ocean. Weather and tidal patterns, including 100-year or more storms and king tides, may exacerbate the effects of sea level rise. Coastal areas like San Francisco are at risk of floods that could affect private development and public infrastructure, including roads, utilities, emergency services, schools, and parks. As a result, the City could lose considerable tax revenues and many residents, businesses, and governmental operations along the waterfront could be displaced. The City, including the Commission, could be required to mitigate these effects at a potentially material cost.

Projections of the effects of global climate change on the City, the Airport and Airport tenants, and on Airport operations are complex and depend on many factors that are outside the Airport's control. Climate change may affect Airport operations directly, as discussed at length above, or indirectly, such as by disrupting operations at other airports that have ripple effects in the air transportation system. The various scientific studies that forecast climate change and its adverse effects, including sea level rise and flooding risk, are based on assumptions contained in such studies, but actual events may vary materially. Also, the scientific understanding of climate change and its effects continues to evolve. Accordingly, the Airport is unable to forecast when sea level rise, other adverse effects, or the confluence of these events or effects of climate change (e.g., the occurrence and frequency of 100-year storm events and king tides) will occur. In particular, the Airport cannot predict the timing or precise magnitude of adverse economic effects, including, without limitation, material adverse effects on the business operations or financial condition of the Airport and the local economy during the term of the Series 2019E-H B onds. While the effects of climate change may be mitigated by the Airport's past and future investment in adaptation strategies, the Airport can give no assurance about the net effects of those strategies and whether the Airport will be required to take additional adaptive mitigation measures. If necessary, such additional measures could require significant capital resources.

For further discussion of some capital spending associated with sea level rise, see "CAPITAL PROJECTS AND PLANNING - Other Anticipated Capital Needs-FEMA Flood Insurance Rate Map Update" and "-Shoreline Protection Program"

Beyond the direct adverse material effect of global climate change itself, present, pending and possible regulations aimed at curbing the effects of climate change may directly or indirectly materially adversely affect the operations or financial condition of the Airport. These include federal and state regulations and international accords pertaining to greenhouse gas emissions that could require significant upgrades to planes, increase the cost of jet fuel, or both, thus increasing the cost of, and potentially reducing passenger demand for, air travel. See "SAN FRANCISCO INTERNATIONAL AIRPORT—Certain Federal and State Laws and Regulations—Current and Possible Regulation Related to Climate Change." The Commission is unable to predict what additional laws and regulations with respect to greenhouse gas ("GHG") emissions or other environmental issues (including but not limited to air, water, hazardous substances and waste regulations) will be adopted, or what effects such laws and regulations will have on the Airport, airlines operating at the Airport, other Airport tenants, or the local economy. The effects, however, could be material.

Cybersecurity

The Airport, like many other large public and private entities, relies upon a large and complex technology environment to conduct its operations, and faces multiple cybersecurity threats including, but not limited to, hacking, phishing, viruses, malware and other attacks on its computing and other digital networks and systems (collectively, "Systems Technology"). As a recipient and provider of personal, private, or sensitive information, the Airport may be the target of cybersecurity incidents that could result in adverse consequences to the Airport's Systems Technology, requiring a response action to mitigate the consequences. The Airport's Cybersecurity team employs a Security Operations Center (for 24/7 monitoring of the network and Internet connectivity) as part of its IT Risk Management and Mitigation strategy.

Cybersecurity incidents could result from unintentional events, or from deliberate attacks by unauthorized entities or individuals attempting to gain access to the Airport's Systems Technology for the purposes of misappropriating assets or information or causing operational disruption and damage. To mitigate the risk of business operations impact and/or damage from cybersecurity incidents or cyber-attacks, the Airport invests in multiple forms of cybersecurity and operational safeguards. In November 2016, the City adopted a City-wide Cyber Security Policy ("Cyber Policy") to support, maintain, and secure critical infrastructure and data systems. The objectives of the Cyber Policy include the protection of critical infrastructure and information, risk management, the improvement of cyber security event detection and remediation, and the facilitation of cyber awareness across all City departments, including the Airport. The City's Department of Technology has established a cybersecurity team to work across all City departments, including the Airport, to implement the Cyber Policy. The City's Cyber Policy is reviewed periodically.

The City has also appointed a City Chief Information Security Officer ("CCISO"), who is directly responsible for understanding the business and related cybersecurity needs of the City's 54 departments, including the Airport. The CCISO is responsible for identifying, evaluating, responding, and reporting on information security risks in a manner that meets compliance and regulatory requirements, and aligns with and supports the risk posture of the City.

While Airport cybersecurity and operational safeguards are periodically tested, no assurances can be given by the Commission that such measures will ensure against other cybersecurity threats and attacks. Cybersecurity breaches could damage the Airport's Systems Technology and cause material disruption to the Airport's finances or operations. The costs of remedying any such damage or protecting against future attacks could be substantial. Further, cybersecurity breaches could expose the Airport to material litigation and other legal risks, which could cause the Airport to incur material costs related to such legal claims or proceedings.

The airlines serving the Airport and other Airport tenants also face cybersecurity threats that could affect their operations and finances.

Credit Risk of Financial Institutions Providing Credit Enhancement and Other Financial Products Relating to Airport Bonds

The Commission has obtained credit enhancement agreements from a variety of financial institutions relating to its outstanding variable rate B onds and Commercial Paper Notes, including letters of credit from commercial banks and municipal bond insurance policies issued by bond insurance companies. Additionally, in connection with various variable rate B onds, the Commission has entered into interest rate swap agreements with and/or guaranteed by various financial institutions. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION—Interest Rate Swaps" and "—Credit Facilities" and "SECURITY FOR THE SERIES 2019E-H BONDS—Reserve Fund; Reserve Accounts; Credit Facilities" and "—Rights of B ond Insurers."

During and following the U.S. recession in 2007–2009 each of the Rating Agencies downgraded the claims-paying ability and financial strength ratings of most of the nation's monoline bond insurance companies and many commercial banks and other financial institutions, though many of the institutions have subsequently been upgraded. The Rating Agencies could announce downgrades of these entities in the future. Such adverse ratings developments with respect to credit providers or municipal bond insurers could have an adverse effect on the Commission, including significant increases in its debt service costs.

In addition, rating downgrades of swap counterparties could result in termination events or events of default under swap agreements. Payments required under these agreements in the event of any termination could be

substantial and could have an adverse impact on the liquidity position of the Commission. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Interest Rate Swaps."

Limitation of Remedies

Any remedies available to the Owners of the Bonds upon the occurrence of an Event of Default under the 1991 Master Resolution are in many respects dependent upon judicial actions which are in turn often subject to discretion and delay and could be both expensive and time-consuming to obtain. If the Commission fails to comply with its covenants under the 1991 Master Resolution including its covenant to pay principal of or interest on the Bonds, there can be no assurance that available remedies will be adequate to fully protect the interests of the Owners of the B onds. The ability of the Commission to comply with its covenants under the 1991 Master Resolution and to generate Net Revenues sufficient to pay principal of and interest on the B onds may be adversely affected by actions and events outside of the control of the Commission, or may be adversely affected by actions taken (or not taken) by voters or payers of fees and charges, among others. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Certain Federal and State Laws and Regulations-State Proposition 218" and "-State Proposition 26." Further, the rate covenant included in the 1991 Master Resolution provides that if the requirement that Net Revenues together with any Transfer equal at least 125% of aggregate Annual Debt Service with respect to the Bonds is not met, so long as the Commission is taking specified steps to meet the rate covenant, an Event of Default will not be triggered until after the following Fiscal Year. See "SECURITY FOR THE SERIES 2019E-H BONDS-Rate Covenant." The ability of the Commission to increase its rates, fees and charges and to reduce its expenses will be limited by, among other things, existing contracts and federal law.

The B onds are not subject to acceleration under any circumstances or for any reason, including without limitation upon the occurrence and continuance of an Event of Default under the 1991 Master Resolution. Moreover, the B onds will not be subject to mandatory redemption or mandatory purchase or tender for purchase upon the occurrence and continuance of an Event of Default under the 1991 Master Resolution to the extent the redemption or purchase price of such B onds is payable from Net Revenues. However, B onds may be subject to mandatory redemption or mandatory purchase or tender for purchase if the redemption or purchase price of such B onds is payable from a source other than Net Revenues such as a Credit Facility or Liquidity Facility.

In addition to the limitations on remedies contained in the 1991 Master Resolution, the rights and obligations under the 1991 Master Resolution may be subject to the limitations on legal remedies against charter cities and counties in the State, as well as applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights generally, now or hereafter in effect, the exercise by the United States of America of the powers delegated to it by the Constitution, the reasonable and necessary exercise, in certain exceptional situations, of the police powers inherent in the sovereignty of the State and its governmental bodies in the interest of serving a significant and legitimate public purpose, and to the application of general principles of equity, including, without limitation, concepts of materiality, reasonableness, good faith and fair dealing and the possible unavailability of specific performance or injunctive relief, regardless of whether considered in a proceeding in equity or in law. Bankruptcy proceedings, if initiated, could subject the Owners of the Bonds to judicial discretion and interpretation of their rights in bankruptcy proceedings or otherwise, and consequently may entail risks of delay or limitation or modification of rights. The various legal opinions to be delivered with respect to the Series 2019E-H Bonds are expected to be qualified by reference to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity: to the exercise of judicial discretion; and to limitations on legal remedies against charter cities and counties in California. In the event the Commission fails to comply with its covenants under the 1991 Master Resolution, there can be no assurance that available remedies will be adequate to fully protect the interests of the holders of the Series 2019E-H B onds.

Potential Effect of a City Bankruptcy

The City is authorized under California law to file for bankruptcy protection under Chapter 9 of the Bankruptcy Code. However, third parties cannot bring involuntary bankruptcy proceedings against the City. The Airport, being a department of the City and not a separate legal entity, cannot itself file for bankruptcy protection.

Should the City become a debtor in a bankruptcy proceeding, the owners of the Series 2019E-H B onds would continue to have a lien on Net Revenues after the commencement of the bankruptcy case so long as the Net Revenues constitute "special revenues" within the meaning of the Bankruptcy Code. "Special revenues" are defined under the

Bankruptcy Code to include, among other things, receipts by local governments from the ownership, operation or disposition of projects or systems that are primarily used to provide transportation services. While the Net Revenues appear to be "special revenues," no assurance can be given that a court would not determine otherwise. Bankruptcy courts are courts of equity and as such have broad discretionary powers, and there is no binding judicial precedent dealing with the treatment in bankruptcy proceedings of airport revenues collected for the payment of bonds in California. If Net Revenues do not constitute "special revenues," there could be delays or reductions in payments by the Commission with respect to the Series 2019E-H B onds.

Furthermore, although the automatic stay arising upon the filing of a bankruptcy petition under Chapter 9 has historically been understood not to stay the collection and application of "special revenues" to payment of bonds secured by such special revenues, if the City were to become a debtor in a proceeding under Chapter 9, the bankruptcy court could possibly decide that (i) post-bankruptcy B ond payments by the City are merely optional and not mandatory under the special revenues provisions of the B ankruptcy Code and/or (ii) the automatic stay exception for special revenues in those provisions does not apply (including to possible enforcement action by the Trustee) or is limited to amounts then on hand with the Trustee or the City. If the bankruptcy court were to interpret the B ankruptcy Code in that (or a similar) fashion, the parties to the proceeding may thus be prohibited from taking any action to collect the Net Revenues, or to enforce any related obligation connected with the Series 2019E-H B onds, without the bankruptcy court's permission.

Even if the Net Revenues are "special revenues," to enable continued operations of a municipal enterprise like the Airport the Bankruptcy Code provides that special revenues can be applied first to necessary operating expenses of the project or system from which the special revenues are derived, before they are applied to other obligations. This rule applies regardless of the provisions of the transaction documents. Thus, in a bankruptcy case of the City, the Net Revenues could be used to pay necessary operating expenses of the Airport, before the remaining Net Revenues are turned over to the Trustee to pay amounts owed to the holders of the Series 2019E-H Bonds. It is not clear precisely which expenses would constitute necessary operating expenses of the Airport. In addition, there may be delays or reductions in payments on the Series 2019E-H Bonds in a Chapter 9 proceeding, especially if the City does not voluntarily pay Net Revenues in its possession to the Trustee.

Regardless of any specific determinations by a U.S. Bankruptcy Court in a City bankruptcy proceeding that may be adverse to the Airport or the Owners, the mere filing by the City for bankruptcy protection likely would have a material adverse effect on the marketability and market price of the Series 2019E-H B onds.

Also see "-Limitation of Remedies" above.

Future Legislation and Regulation

The Airport is subject to various laws, rules and regulations adopted by the local, State and federal governments and their agencies. The Airport is highly regulated by federal agencies including the FAA, the Transportation Security Administration ("TSA"), Customs and Border Protection ("CBP") and the U.S. Department of Health and Human Services. In the past, actions, rules and policies by these agencies (in particular the FAA, the TSA and CBP) have required the Airport to undertake additional capital and equipment expenditures, have affected passenger traffic, or both. The Commission is unable to predict the adoption or amendment of additional laws, rules or regulations, or their effect on the operations or financial condition of the Airport.

Initiative, Referendum and Charter Amendments

The ability of the Commission to comply with its covenants under the 1991 Master Resolution, including to generate revenues sufficient to pay the principal of and interest on the Series 2019E-H B onds, may be adversely affected by actions taken (or not taken) by voters. Under the State Constitution, the voters of the State have the ability to initiate legislation and require a public vote on legislation passed by the State Legislature through the powers of initiative and referendum, respectively. Under the Charter, the voters of the City can restrict or revise the powers of the Commission through the approval of a Charter amendment. The Commission is unable to predict whether any such initiatives might be submitted to or approved by the voters, the nature of such initiatives, or their potential impact on the Commission or the Airport.

Potential Limitation of Tax Exemption of Interest on Series 2019E-H Bonds

From time to time, the President of the United States, the United States Congress and/or state legislatures have proposed and could propose in the future, legislation that, if enacted, could cause interest on the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019H Bonds to be subject, directly or indirectly, to federal income taxation or could cause interest on the Series 2019E-H Bonds to be subject to or exempted from state income taxation, or otherwise prevent Beneficial Owners from realizing the full current benefit of the tax status of such interest. Clarifications of the Internal Revenue Code of 1986, as amended (the "Code"), or court decisions may also cause interest on the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019H Bonds to be subject, directly or indirectly, to federal income taxation or may cause interest on the Series 2019E-H Bonds to be subject to or exempted from state income taxation. The introduction or enactment of any such legislative proposals or any clarification of the Code or court decisions may also affect the market price for, or marketability of, the Series 2019E Bonds, the Series 2019F Bonds and the Series 2019H Bonds. Prospective purchasers of the Series 2019E-H Bonds should consult their own tax advisors regarding any such pending or proposed federal or state tax legislation, regulations or litigation, as to which Co-Bond Counsel expresses no opinion. See "TAX MATTERS."

Risk of Tax Audit

The Internal Revenue Service (the "IRS") includes a Tax Exempt and Government Entities Division (the "TE/GE Division"). The TE/GE Division has a subdivision that is specifically devoted to tax-exempt bond compliance. The number of tax-exempt bond examinations has increased significantly under the TE/GE Division. If the IRS undertook an examination of the Series 2019E B onds, the Series 2019F B onds, the Series 2019H B onds, or other B onds issued by the Commission as tax-exempt bonds, it may have a material adverse effect on the marketability or the market value of the Series 2019E B onds, the Series 2019F B onds or the Series 2019H B onds. The IRS has undertaken limited examinations of three prior issues of the B onds. All three of those examinations were closed without the IRS taking any action. The Commission is not aware of any other IRS examination or investigation of its tax-exempt bonds. See "Tax Matters."

Income Taxation Risk Upon Defeasance of the Series 2019G Bonds

In the event the Commission were to defease all or a portion of the Series 2019G B onds, for federal income tax purposes, the Series 2019G B onds that are the subject of such a defeasance may be deemed to be retired and "reissued" as a result of the defeasance. In such an event, a bondholder who owns such a Series 2019G B ond may recognize a gain or loss on the Series 2019G B ond at the time of defeasance. Holders who own Series 2019G B onds should consult their own tax advisors regarding the tax consequences of a defeasance of the Series 2019G B onds. See "Tax Matters -Series 2019G B onds (Taxable)."

SAN FRANCISCO INTERNATIONAL AIRPORT

Introduction

San Francisco International Airport, which is owned and operated by the City, is the principal commercial service airport for the San Francisco B ay Area. The Airport is located 14 miles south of downtown San Francisco in an unincorporated area of San Mateo County between the Bayshore Freeway (U.S. Highway 101) and the San Francisco Bay. According to data for calendar year 2017 from Airports Council International ("ACI"), the Airport ranked 7th in the United States in terms of passengers and 15th in the United States in terms of air cargo tonnage. According to Fiscal Year 2016–17 U.S. Department of Transportation ("U.S. DOT") statistics, the Airport is also a major origin and destination point (7th for domestic origin and destination traffic and 4th for overall origin and destination traffic in the United States). The Airport is also one of the nation's principal gateways for Pacific traffic and serves as a domestic hub and Pacific gateway for United Airlines. Passenger enplanements and deplanements at the Airport have grown from approximately 38.2 million in Fiscal Year 2009–10 to approximately 57.4 million in Fiscal Year 2018–19.

Organization and Management

Under the Charter, the Commission is responsible for the operation and management of the Airport, which is an enterprise department of the City. The Commission consists of five members appointed by the Mayor of the City for four-year overlapping terms. All appointments are subject to rejection by a two-thirds vote of the Board of

Supervisors and any member may be removed by a three-fourths vote of the B oard of Supervisors but only for official misconduct.

The current members of the Commission and their respective occupations and terms are as follows:

Current Members of the Commission

M ember	Occupation	Term Ends August 31 of
Larry Mazzola, President	Retired Business Manager and Financial Secretary— Treasurer, U.A. Local 38 (United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada)	2022
Linda S. Crayton, Vice President	Retired Senior Regional Director, Government Relations, Comcast Cable Communications	2020
Richard J. Guggenhime	Attorney (Senior Counsel), Perkins Coie LLP	2021
E leanor J ohns	Executive Director of the Willie L. Brown, Jr. Institute on Politics and Public Service	2019*
Malcolm Y eung	Deputy Director of Programs, Chinatown Community Development Center	2022

^{*} Under the Charter, the tenure of a member of the Commission terminates no later than 60 days after the expiration of the member's term, unless the member is re-appointed. A member may not serve as a hold-over member of the Commission for more than 60 days after the expiration of his or her term.

Under the Charter, the Commission is responsible for the "construction, management, supervision, maintenance, extension, operation, use and control of all property, as well as the real, personal and financial assets which are under the Commission's jurisdiction." The Commission has the exclusive authority to plan and issue revenue bonds for airport-related purposes, subject to the approval, amendment or rejection by the Board of Supervisors.

Under the City Administrative Code, the Commission also has exclusive power to fix and adjust Airport rates, fees and charges for services and facilities provided by the Airport.

The Commission's budget and certain Commission contracts and leases (generally, those for a term of more than 10 years or involving revenue to the City of more than \$1,000,000 or expenditures of more than \$10,000,000), and modifications thereto, require approval of the B oard of Supervisors. In addition, if any project is estimated to cost more than \$25 million, and more than \$1 million in predevelopment, planning or construction costs will be paid with City funds, then the B oard of Supervisors is required to make a determination of fiscal feasibility prior to the commencement of environmental review, if any, on such project. Certain actions of the B oard of Supervisors are also subject to approval by the Mayor.

Other City departments provide various services to the Commission, including the Police Department, the Fire Department, the Water Department, the Hetch Hetchy Power Division, the Department of Public Works, the City Controller, the Purchasing Department and the City Attorney. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City."

Airport Senior Management and Legal Counsel

Senior management is led by the Airport Director (the "Director"), who has the authority to administer the affairs of the Commission as the chief executive officer thereof. Under the Charter, the Director is appointed by the Mayor from candidates submitted by the Commission. Once appointed by the Mayor, the Director serves at the pleasure of the Commission. The City Attorney serves as the legal advisor to the Commission.

The Airport Director has the authority to administer the affairs of the Commission as the chief executive officer thereof. The Airport has a Chief Operating Officer, a Chief Business and Finance Officer, a Chief Administration and Policy Officer, a Chief Development Officer and a Chief External Affairs Officer, all of whom report directly to the Airport Director. The Divisions of Airport Services, Safety and Security Services, Guest Services, Airport Facilities, Information Technology and Telecommunications, and Museum report to the Chief Operating Officer. The Divisions of Design & Construction and Planning & Environmental Affairs report to the Chief Development Officer. The Divisions of People, Performance & Development, Environmental Policy & Sustainability, and Social Responsibility & Community Sustainability report to the Chief Administration and Policy Officer. The Divisions of Marketing, Communications, Government Affairs, and International Marketing & Aviation Development report to the Chief Administration and Policy Officer.

Because the Commission believes that the financial and operational performance of the Airport depends in part on the strategies and principles that have been followed by senior management in recent years, it has adopted several policies with the objective of maintaining continuity and continuing to follow such strategies and principles. These policies include, among others, policies on shared use of systems, infrastructure, and services by multiple airline tenants, concessionaries and others; maintenance of ownership by the Airport of its data and digital assets; maintaining a level playing field for all air carriers; controlling, developing and financing the Airport's assets without use of public-private partnerships; and integrating collaborative, structured partnering into the Airport's development projects.

Brief biographies of the principal members of the senior management and legal counsel at the Airport are set forth below:

Ivar C. Satero was appointed as Director effective July 21, 2016. Prior to this, he served as Chief Operating Officer from April 2014 until his appointment as Director. Prior to that, he served as Deputy Airport Director-Design and Construction Division from December 2003. From February 2002 through November 2003, he served as the Administrator of the Bureau of Design and Construction and then as the Administrator of Airport Development. From February 1994 to February 2002, Mr. Satero was the Program Manager of transit projects for the Airport's Master Plan Program, including the AirTrain System and the BART extension to the Airport. Prior to joining the Airport in February 1994, Mr. Satero worked for the Public Utilities Commission of the City as Project Engineer/Project Manager for various municipal railway and Hetch Hetchy water system capital improvement projects.

Leonardo "Leo" Fermin, Jr. was appointed Deputy Airport Director, Business and Finance (subsequently renamed Chief Business and Finance Officer) in July 2003. From October 2002 until July 2003, he served as Acting Deputy Airport Director of Business and Finance. He has been with the Airport since July 1986, serving in a number of positions, including Finance Director. Prior to joining the Airport, Mr. Fermin served in a variety of finance and accounting capacities in the private sector. In October 2002, Mr. Fermin was nominated for the City's Public Managerial Excellence Award. He has been a member of the ACI World Economics Standing Committee since 2004, and served as Chair from 2007 to 2009.

Julian Potter was appointed Chief Administration and Policy Officer in February 2014. Ms. Potter joined the Airport staff in January 2008 as the Federal and Regional Government Affairs manager and became Chief of Staff in December 2013. Prior to joining the Airport, Ms. Potter was the Director of Public Policy for the Mayor's office in the City. Ms. Potter has an additional 15 years of public policy and administrative experience serving as a Deputy Assistant Secretary at the U.S. Department of Housing and Urban Development, Chief Operating Officer of a building and construction apprenticeship program and Special Assistant to the U.S. President.

Jeff Littlefield was appointed Chief Operating Officer in July 2016. Prior to this, he served as the Deputy Airport Director-Operations and Security from 2011 until taking on his new role, and as Deputy Airport Manager from 2008 to 2011. Prior to joining the Airport, Mr. Littlefield served 21 years for United Airlines in a variety of operational capacities, including nine years as General Manager at Oakland Airport.

Geoffrey W. Neumayr was appointed Chief Development Officer in July 2016. In that capacity he oversees both the Design and Construction and Planning divisions. Prior to this, he served as Deputy Director of Design and Construction beginning in 2014. Mr. Neumayr joined the Airport staff as Associate Deputy Airport Director of Design and Construction in August 2011. Prior to that, he was Vice President of Operations of the Allen Group, LLC for 15 years. With the Allen Group, LLC Mr. Neumayr served as the Project Manager for many of the Airport's construction projects. Prior to joining the Allen Group in 1995, Mr. Neumayr was an Associate with the architectural and

engineering firm of the Watry Design Group where he served as a project manager. Mr. Neumayr is a licensed civil and structural engineer with over 30 years of experience in design and construction.

Jon Ballesteros was appointed Chief External Affairs Officer May 1, 2017. As Chief External Affairs Officer, Mr. Ballesteros oversees Government Affairs, Communications, Marketing, International Aviation Development, Reprographics, Protocol and International Trade and Commerce. In this capacity, Mr. Ballesteros focuses on ensuring governmental actions benefit the Airport, leads the team that concentrates on ensuring internal and external stakeholders are well informed and helps drive the promotion of the Airport as a premier gateway to California and the United States. Prior to joining Airport staff, Mr. Ballesteros's professional experience includes positions with San Francisco Travel Association, Port of Oakland, Wells Fargo & Company, the City and County of San Francisco and the Bay Area Air Quality Management District.

Sheryl L. Bregman was appointed Airport General Counsel in April 2011. Ms. Bregman manages the onsite Airport Legal Division for the San Francisco City Attorney. The division provides a full range of in-house legal services to the Commission (leases and permits, environmental/land use regulations, construction, operations (security/safety), contracts, labor, municipal finance, litigation, and general government). Ms. Bregman joined the Office of the San Francisco City Attorney in 1995 as a Deputy City Attorney and advised San Francisco public agencies on public work design and construction projects and transactions, drafted legislation, prosecuted administrative enforcement actions, and litigated government contract cases. Prior to joining the Office of the San Francisco City Attorney, Ms. Bregman was in private practice.

Current Airport Facilities

Airfield

The Airport's runway and taxiway system occupies approximately 1,700 acres and includes four intersecting runways, three of which are equipped with instrument landing systems (an "ILS") for arrivals. The east-west runways are 11,870 and 11,381 feet long, respectively. The north-south runways are 8,650 and 7,650 feet long, respectively. The current runway system can accommodate the arrival and departure at maximum loads of all commercial aircraft currently in service, including the Airbus A380. The runways are built on bay tidelands that were filled during and after World War II. As a result, the runways continue to settle at various rates and require periodic repair and maintenance work. See "-Settlement and Subsidence."

Terminals

International Terminal. The International Terminal Complex (the "ITC"), which was completed in 2000, is a 2.5 million square foot facility located directly above an entry roadway network and houses ticketing, Federal Inspection Service (Customs and Border Protection) ("FIS") facilities, baggage facilities, concessions, and airline offices. The approximately 1.7 million square foot terminal connects to Boarding Areas A and G, which have a combined space of approximately 872,000 square feet and 25 gates. The ITC includes an approximately 229,000 square foot FIS facility capable of processing 5,000 passengers per hour. The Airport owns and the airlines maintain the common-use baggage system that supports all airlines in the ITC.

Other Airport Terminals. In addition to the ITC, the Airport has three other terminal buildings (together with the ITC, the "Terminal Complex") consisting of a total of approximately 2.8 million square feet of space.

The Harvey B. Milk Terminal 1 ("Terminal 1"), Terminal 2 and Terminal 3 handle primarily domestic flights and flights to Canada and Mexico. Terminal 1 improvements are currently in various stages of design and construction. The first portion of the improvements, consisting of nine gates, opened in July 2019, and the remaining improvements are expected to be completed in phases in 2020, 2021 and 2023. In April 2011, the Airport unveiled the renovated Terminal 2. Terminal 2 was the first airport terminal in the United States to achieve Gold Certification under the U.S. Green Building Council's Leadership in Energy and Environmental Designs (LEED™) program. Parts of Terminal 3 have also been renovated to the same customer experience and environmental standards as Terminal 2. Additional Terminal 3 renovations are in progress and are expected to be completed in spring 2023. See "CAPITAL PROJECTS AND PLANNING − The Capital Improvement Plan − Major Ascent Program − Phase I Capital Projects − Terminals."

AirTrain System

The AirTrain System provides elevated light rail transit service over a "terminal loop" to serve the Terminal Complex and over a "north corridor loop" to serve the rental car facility and other locations situated north of the Terminal Complex. The AirTrain stations are located at the north and south sides of the ITC, Terminals 1, 2 and 3, at the two short-term ITC parking garages, on Lot "D" to serve the rental car facility, and on McDonnell Road to serve the West Field area of the Airport. The AirTrain runs 24 hours per day, 7 days per week. Currently, the AirTrain system is being extended and there are two AirTrain stations under construction, one at the On-Airport Hotel (which is also under construction) and the second between the long-term parking garages. See "- Public Parking and Rental Car Facilities."

Gates

The Airport has 94 operational gates, 42 of which can accommodate wide-body aircraft. Of these, 25 gates are located in the ITC, 19 in Terminal 1, 16 in Terminal 2, and 34 in Terminal 3. The International Terminal and Terminal 2 each have one bus gate, where passengers are transported by bus between the terminal gate and a remote aircraft parking position located on the airfield. Each of these remote bus gates counts as an operational gate. Once the planned improvements discussed above under "-Terminals-Other Airport Terminals" are completed, Terminal 1 is expected to have a total of approximately 34 gates.

Generally, existing major airport facilities in the United States are designed for aircraft having a maximum wingspan of 213 feet. New Large Aircraft (such as the Airbus A380) ("NLAs") have a wingspan of between 225 and 262 feet. The Airport currently operates five gates in the ITC with sufficient clearance to accept NLAs.

From time to time, gates are taken out of service during periods of construction and renovation. The Commission expects to maintain at least 90 operational gates during ongoing terminal renovation projects.

Gates in the domestic terminals are used by airlines on a preferential or common-use basis, and gates in the ITC are used on a common or joint-use basis. Gates assigned to an airline for preferential use are allocated on an annual basis in accordance with a formula taking into account each airline's scheduled seats. Gates can thus be recaptured by the Airport annually from airlines with decreasing traffic and allocated to other airlines with increasing traffic. Any preferential-use gate can also be used by any airline when it is not actively being used by the airline to which it is allocated. See "-Airline Agreements-Lease and Use Agreements" and Appendix E-"Summary of Certain Provisions of the Lease and Use Agreements."

Air Traffic Control Tower

Construction of a new 221-foot tall Air Traffic Control Tower was completed in August 2015. The FAA activated and commissioned the new Air Traffic Control Tower in October 2016. The Air Traffic Control Tower also includes an integrated building in the base of the tower, providing public space, public restrooms, and a secure connector linking Terminal 1 B oarding Area C with Terminal 2.

Jet Fuel Distribution System

The Airport leases its on-Airport jet fuel receiving, storage, distribution and other related facilities (collectively, the "Fuel System") to SFO Fuel. Airlines providing substantially all of the regularly-scheduled service to the Airport are members of SFO Fuel. Pursuant to an interline agreement governing the business relationship between SFO Fuel and its members, the members of SFO Fuel are jointly responsible, on a step-up basis, for all costs, liabilities and expenses of SFO Fuel. SFO Fuel is responsible for the management and operation of the Fuel System. Operation and management of the Fuel System is performed by Aircraft Services International, Inc., a wholly owned subsidiary of Menzies Aviation Inc., pursuant to an operation and management agreement with SFO Fuel.

The Fuel System currently includes a pipeline distribution system consisting of two main distribution pipelines that provide redundancy in the event of a pipeline break, a fuel supply terminal loop around the Terminal Complex, and various hydrant systems from the pipeline loop to the gates, all of which are leased to SFO Fuel by the Airport; above-ground storage tanks owned by the Airport and leased to SFO Fuel with total working storage capacity of approximately 134,000 barrels (representing approximately 1.7 days of operations based upon average consumption during the period from June 1, 2018 through May 31, 2019), and above-ground storage tanks owned by SFO Fuel with

total working storage capacity of approximately 147,500 barrels (representing approximately 1.9 days of operations based upon average consumption during the period from June 1, 2018 through May 31, 2019), all of which storage tanks are located on land leased by SFO Fuel from the Airport; and other related facilities.

SFO Fuel has various arrangements with other entities to increase its off-Airport jet fuel storage capacity. SFO Fuel has an arrangement with an affiliate of Shell Oil for additional off-Airport jet fuel storage capacity of approximately 181,000 barrels of working storage capacity (representing approximately 2.3 days of operations based upon average consumption during the period from June 1, 2018 through May 31, 2019) immediately adjacent to the Airport. In addition, SFO Fuel has an arrangement with Kinder Morgan for an additional approximately 150,000 barrels of working storage capacity (representing approximately 1.9 days of operations based upon average consumption during the period from June 1, 2018 through May 31, 2019) of off-Airport jet fuel working storage capacity.

In the summer of 2016, a confluence of a major tank repair, high air travel activity, and current pipeline capacity resulted in decreased fuel stores. In the summer of 2017, high air travel activity and temporary pipeline capacity constraints had a similar result. To recover, SFO Fuel trucked fuel in, and implemented a tankering initiative, in which airlines serving the Airport were asked by SFO Fuel to reduce their fuel uptake at the Airport. During the summer of 2018, SFO Fuel requested that airlines not take on more fuel than necessary at the Airport and SFO Fuel also trucked in fuel. Some of these strategies are being undertaken this summer, and the Commission expects that SFO Fuel could employ the same strategies if the fuel supply to the Airport were to drop again. SFO Fuel, and not the Commission, is responsible for receipt, storage and distribution of jet fuel through the Fuel System at the Airport. Airlines and fuel suppliers are responsible for the procurement and delivery of jet fuel to the Fuel System. Competitive into-plane service providers are responsible for delivery of jet fuel into-aircraft from the Fuel System. SFO Fuel anticipates constructing approximately 134,000 barrels of additional on-Airport working storage capacity to provide increased security of fuel supply as well as to satisfy recent and projected potential fuel demand increases. This project is being funded with the proceeds of Special Facility B onds that the Commission issued in February 2019. See "SECURITY FOR THE SERIES 2019E-H B ONDS-Other Indebtedness-SFO Fuel Bonds."

Bay Area Rapid Transit ("BART") Service to SFO

BART has provided direct service to the Airport since 2003. This service provides a convenient connection between the Airport and the greater San Francisco B ay Area that is served by BART. According to BART statistics for Fiscal Y ear 2017–18, a weekday average of 6,302 riders exited at the SFO BART station. BART service to the Airport travels directly through San Francisco from various points in the East B ay. Additionally, an intermodal station in the City of Millbrae provides a direct link between BART and Caltrain offering additional transit options and connection to the southern parts of the B ay Area as well as San Francisco. BART pays the Airport \$2.5 million per year in rent for the BART station in the ITC, plus an additional amount (\$992,094 for Fiscal Year 2017–18) for custodial and electrical support services.

Public Parking and Rental Car Facilities

<u>Public Parking</u>. A 5,030 space hourly Domestic Parking Garage is connected to the three domestic terminals by seven pedestrian tunnels and three pedestrian bridges. The Domestic Parking Garage features ParkFAST, reserved covered parking with an automated entry and exit system, and ParkVALET, providing valet service to all terminals (domestic and international). Two public garages located near the ITC provide 1,897 spaces for short-term parking. Approximately 7,296 spaces are available for public long-term parking approximately 1.5 miles from the Terminal Complex.

Travelers will be transported from the long-term garages to the terminals via the Airport's existing shuttle bus service until the AirTrain extension to the long-term parking garages is completed (expected to occur in fall 2020).

Rental Car Facility. An approximately 5,000 space, full service rental car facility for all on-Airport rental car companies is located approximately one mile north of the Terminal Complex and is accessed from the terminals by the AirTrain.

Off-Airport Parking Facilities. Parking facilities located near the Airport and operated by private companies offer more than 8,000 public remote parking spaces for Airport patrons, including a 1,500 space parking garage that is located near the long-term parking facilities owned by the Airport.

Maintenance and Cargo Facilities

Airlines have made various investments in facilities at the Airport. The United Airlines maintenance center, containing approximately three million square feet of building and hangar floor area, is one of the country's largest private aircraft maintenance facilities. United Airlines also operates a large cargo facility at the Airport. Both of these facilities are owned by the Airport but leased to the airline. American Airlines also operates a major maintenance facility at the airport, and certain other airlines and aviation support companies lease and operate significant cargo, maintenance and other facilities at the Airport.

Seismic Design of Airport Facilities

The Airport's facilities are assigned to Seismic Design Category ("SDC") E or F under current building codes. An SDC is a classification assigned to a structure based on its occupancy and on the level of expected ground motion in the event of an earthquake. The SDCs range from Category A (corresponds to buildings that present a low hazard to human life located in areas with very small seismic vulnerability) to Category F (corresponds to essential facilities located near major active faults).

The ITC was designed as an "essential facility" (i.e., a facility that is immediately occupiable following a maximum credible seismic event), exceeding the minimum applicable design requirements for a building of its type. In addition, other buildings and facilities constructed by the Airport during the 1990s and early 2000s as part of the Airport's Master Plan Expansion Program were designed to comply with, and in some cases exceed, the then-current seismic design standards. These facilities include the AirTrain System (guideway, stations, and maintenance building); the elevated circulation roads and inbound/outbound freeway ramps; international, long-term and employee parking garages; the Rental Car Center; the Communications Center located in a portion of the North Connector Building that links Terminal 2 to Terminal 3; and the on-Airport BART station and guideway. In the late 2000s, the Airport also completed a seismic retrofit of the Airport's upper level viaduct, bringing it up to then-current seismic design standards.

As part of the Airport's Terminal 2 Renovations program, the Terminal 2/B oarding Area D facility received a seismic upgrade which allowed the facility to meet then-current seismic standards.

The Air Traffic Control Tower, which is located between Terminals 1 and 2, was activated in 2016, and was designed as an essential facility. The FAA has developed contingency plans for the operation of air traffic control functions from a temporary site in the event the Air Traffic Control Tower is rendered inoperable due to a seismic event. Such remote operations could result in a reduction in air traffic control service levels and capabilities, and may have a significant impact on the airspace system supporting the Airport.

Terminals 1 and 3 and certain boarding areas in these terminals do not meet current seismic requirements. However, improvements are currently in various stages of design and construction to bring these terminals and boarding areas into compliance. See "CAPITAL PROJECTS AND PLANNING-The Capital Improvement Plan." Terminal 1/B oarding Area B, which opened in 2019, was built to current seismic design standards. Terminal 3/B oarding Area E facility was renovated and reopened in 2014. It was upgraded to current seismic design standards at that time.

See "CERTAIN RISK FACTORS-Seismic and Other Natural Disasters or Emergencies" for further discussion of the seismic risks facing the Airport.

Settlement and Subsidence

Portions of the Airport and other portions of the San Francisco B ay Area, including the City, are built on fill that was placed over saturated silty clay known as "B ay Mud." This B ay Mud is soft and compressible, and the consolidation of the B ay Mud under the weight of the existing fill is ongoing. The Airport has experienced localized differential settlement that it continues to mitigate though regular localized fill and repair. The Airport's runway rehabilitation and overlay program keeps the runways and taxiways in safe operation.

A report issued in March 2018 by researchers at The University of California – Berkeley and the University of Arizona suggests that flooding risk from climate change could be exacerbated in the San Francisco Bay Area due to the sinking or settling of the ground surface, known as subsidence. The study claims that the risk of subsidence is more significant for certain parts of the City built on fill, including portions of the Airport. The Airport has not,

however, experienced the uniform consolidation that is described in this report. Also see "CERTAIN RISK FACTORS-Risks Associated with Global Climate Change."

On-Time Performance and Congestion

On-time flights are defined by the U.S. DOT as any flight that arrives or departs within 15 minutes of the scheduled arrival or departure time. Arrival on-time performance is typically lower at the Airport than at the two other San Francisco B ay Area airports (74% of domestic arrivals were on time at the Airport in the period from July 2017 through June 2018, as compared to 81% at Oakland Airport and 82% at San Jose Airport), primarily due to the prevalence of low clouds and fog around the Airport at various times of the year. In good weather conditions (cloud ceiling of at least 3,600 feet), up to 60 planes per hour can land at the Airport. During adverse weather conditions (cloud ceiling of between 1,600 feet and 3,600 feet), up to 40 planes per hour can land at the Airport.

A runway "slot" is an authorization to either take-off or land at a particular airport on a particular day during a specified time period. "Slot control" involves imposing limits on planned aircraft operations, to limit scheduled air traffic at certain capacity constrained airports. It is a tool used in the United States and around the world to manage air traffic at airports which have been designated as Level 3.

Under the International Air Transport Association Worldwide Slot Guidelines, airports are designated at levels indicating their degree of congestion. Level 1 airports have sufficient capacity to meet demand. Level 2 airports have potential for congestion during some periods of the day, which can be managed through mutual cooperation of the carriers with a schedule facilitator. Level 3 airports have significant potential for delays and are under mandatory slot control, meaning that airlines must obtain advance approval to operate during slot controlled hours. In 2012, the FAA changed the Airport's designation to a Level 2 airport. If the FAA were to designate the Airport to be a Level 3 airport in the future, the FAA could cap airline operations at the Airport and airlines at the Airport could be subject to FAA-administered slot control, which could affect the Commission's ability to manage airline operations at the Airport.

Airport Security

The Airport continually evaluates its security policies, processes and systems to reduce vulnerabilities and mitigate risk. Pursuant to the Aviation and Transportation Security Act, the TSA operates security checkpoints at the Airport. The Airport is one of approximately 22 airports in the nation at which the TSA operates security through its Screening Partnership Program. The Screening Partnership Program contracts security screening services at commercial airports to qualified private companies. The employees of the private security firm undergo the same training and are under the same TSA management as federal-employed security operating at other United States airports. The Screening Partnership Program at the Airport has been in operation since 2002.

Airline Service

General

For Fiscal Y ear 2018–19, the Airport was served by 61 passenger airlines and 5 cargo-only airlines. Domestic passenger air carriers provided non-stop service to 83 destinations and scheduled one-stop service to an additional 8 destinations in the United States. Passenger airlines provided non-stop scheduled passenger service to 53 international destinations and one-stop service to an additional 7 international destinations.

For Fiscal Y ear 2017–18, the Airport was served by 54 passenger airlines and 5 cargo-only airlines. Domestic passenger air carriers provided non-stop service to 84 destinations and scheduled one-stop service to an additional 11 destinations in the United States. Passenger airlines provided non-stop scheduled passenger service to 51 international destinations and one-stop service to an additional 11 international destinations.

During Fiscal Year 2018–19, United Airlines (including SkyWest Airlines/United Express) handled 45.7% of the total enplaned passengers at the Airport (compared to 44.6% in Fiscal Year 2017–18); Alaska Airlines (including Horizon Air and SkyWest Airlines/Alaska Airlines) handled 11.8% of total enplaned passengers; and Delta Air Lines (including Compass Airlines and SkyWest Airlines/Delta Air Lines) handled 7.8% of total enplaned passengers, all based on preliminary data.

Alaska Air Group, Inc., the parent company of Alaska Airlines, and Virgin America, Inc. merged effective December 2016. The merged airline received a single operating certificate from the FAA in January 2018. The merged airline moved to a single reservations system on April 25, 2018, and has adopted Alaska's name and logo and retired the Virgin America brand. B ased on preliminary data, Alaska Airlines handled 11.8% of total enplaned passengers in Fiscal Y ear 2018–19 as compared to a combined share for Alaska Airlines and Virgin America of 12.3% in Fiscal Y ear 2016–17 and 13.2% in Fiscal Y ear 2017–18. In Fiscal Y ear 2018–19, Alaska Airlines decreased seats at the Airport by approximately 11.8% as a result of the restructuring of the combined airline's routes and had approximately 10.9% fewer enplanements than Alaska Airlines and Virgin America had together in Fiscal Y ear 2017–18. See "SAN FRANCISCO INTERNATIONAL AIRPORT—Passenger Traffic—Enplanements" and APPENDIX A— "AIRLINE TRAFFIC AND ECONOMIC ANALYSIS—Airport Role—Low-Cost Carrier Service" and "—Historical Airline Service and Traffic."

Although United Airlines (including SkyWest Airlines/United Express) handled 44.6% of the Airport's total enplanements during Fiscal Year 2017–18, audited results for Fiscal Year 2017–18 indicate that payments by United Airlines accounted for 24.6% of the Airport's operating revenues. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Principal Revenue Sources."

Air Carriers Serving the Airport

The following table lists the air carriers reporting enplaned passengers and/or enplaned cargo at the Airport during Fiscal Year 2018–19.

AIR CARRIERS REPORTING AIR TRAFFIC AT THE AIRPORT (Fiscal Year 2018–19)

Domestic Passenger Air Carriers

Alaska Airlines(1)(2)*

American Airlines* Delta Air Lines*

Frontier Airlines*
Hawaiian Airlines*
jetBlue Airways*
Southwest Airlines*

Sun Country Airlines/MN Airlines*

United Airlines(1)*

Foreign Flag Carriers

Aer Lingus*
Aeromexico
Air Canada*
Air China (CAAC)*
Air France*
Air India*
Air Italy
Air New Zealand*
All Nippon Airways*

Asiana Airlines* British Airways* COPA Airlines* Cathay Pacific Airways*

China Airlines* China Eastern*

China Southern Airlines*

El Al

Iberia⁽³⁾ Icelandair* Interjet

EVA Airways* Emirates Airlines* Fiji Airways* FINNAIR French Bee Hong Kong Air* Foreign Flag Carriers (continued)

Tapan Airlines*

KLM Royal Dutch Airlines*

Korean Áir*

Lufthansa German Airlines* Norwegian Air UK Ltd. Philippine Airlines* Qantas Airways* Scandinavian Airlines* Singapore Airlines* Swiss International*

TACA International Airlines*

TAP Air Portugal
Thomas Cook Group*
Turkish Airlines*
Virgin Atlantic Airlines*
Volaris Airlines
West] et Airlines*
WOW air
XL Airways France

Cargo-Only Carriers

Atlas Air

Federal Express* Kalitta Air*

Nippon Cargo Airlines* Redding Aero Enterprises*

Regional Affiliates⁽⁴⁾

Compass Airlines (American Airlines and Delta Air Lines)

Horizon Air (Alaska Airlines) Jazz Aviation (Air Canada)

SkyWest Airlines (Alaska SkyWest, Delta Connection and United Express)

Source: Commission.

^{*} Indicates a Signatory Airline to a Lease and Use Agreement.

⁽¹⁾ Provides international and domestic air passenger service at the Airport.

⁽²⁾ Alaska Air Group, Inc. and Virgin America, Inc. merged effective December 2016. The merged airline received a single operating certificate from the FAA in January 2018. The merged airline moved to a single reservations system on April 25, 2018, and has adopted Alaska's name and logo and retired the Virgin America brand.

⁽³⁾ Level Airlines has started operating under Iberia's permit.

⁽⁴⁾ Airlines designated as affiliates by Signatory Airlines per the Lease and Use Agreement. Affiliates may (i) be a wholly-owned subsidiary of a Signatory Airline, (iii) be a subsidiary of the same corporate parent of the Signatory Airline, (iii) share flight codes with a Signatory Airline, or (iv) operate cargo feeder flights under the direction and control of a Signatory Airline. Affiliates do not sell their own seats or flights at the Airport.

Low-Cost Carriers

During Fiscal Year 2018–19, domestic low-cost carriers serving the Airport included Frontier Airlines, jetB lue Airways, Southwest Airlines and Sun Country Airlines, and international low-cost carriers serving the Airport included French Bee, Interjet, Norwegian Air UK Ltd., Thomas Cook Airlines, WestJet, WOW air, Volaris and XL Airways. A "low-cost carrier" is an airline that operates under a generally recognized low-cost business model, which may include a single passenger class of service, use of standardized aircraft, fewer in-flight services, use of less expensive airports, and lower employee wages and benefits.

Prior to its January 2018 merger with Alaska Airlines, Virgin America used the Airport as its home base, utilizing a substantial portion of the gates in Terminal 2. Since April 2018, all operations of the merged carrier at the Airport have been recorded as Alaska Airlines operations. Alaska Airlines is not a low-cost carrier.

During Fiscal Year 2018–19, approximately 12.7% of total domestic enplanements at the Airport were provided by low-cost carriers, down from 24.1% in Fiscal Year 2017–18. The significant drop in low-cost carrier market share at the Airport is due to Virgin America enplanements (after Virgin America's merger with Alaska Airlines) no longer being included in the low-cost carrier enplanements. In comparison, domestic enplanements by low-cost carriers were approximately 83.6% of the domestic enplanements at Oakland Airport and 57.7% of the domestic enplanements at San Jose Airport in Fiscal Year 2018–19. See "AIRLINE TRAFFIC AND ECONOMIC ANALYSIS – Airport Role – Low-Cost Carrier Service" in Appendix A for further discussion of the role of low-cost carriers.

Passenger Traffic

Overview

Scheduled Passenger

The Airport was ranked the 4^{th} most active airport in the United States in terms of overall origin and destination passengers and the 7^{th} most active airport in the United States in terms of domestic origin and destination passengers, according to Fiscal Year 2016–17 U.S. DOT statistics. For calendar year 2017, the Airport was ranked the 7^{th} most active airport in the United States in terms of total passengers, according to data from ACI. The Airport accounted for approximately 68.3% of the total air passenger traffic at the three San Francisco Bay Area airports during Fiscal Year 2017–18.

Passenger traffic data for the Fiscal Years 2009-10 through 2018-19 is presented in the table below.

PASSENGER TRAFFIC

Aircraft Arrivals and Departures Passenger Enplanements and Deplanements Total Fiscal Year Total % Change Domestic % Change International % Change Total % Change 2018-19* 448,642 (2.4%)42,653,872 (2.9%)14,790,686 7.0% 57,444,558 (0.5%)2017-18 459,900 5.8 43.926.851 7.0 13.820.335 6.9 57,747,186 7.0 2.5 41,046,640 53,969,058 5.0 2016-17 434,582 3.4 12,922,418 10.3 423,813 2.7 39,697,866 5.6 11,711,366 51,409,232 6.6 2015-16 10.2 412,539 (0.5)37,580,982 4.4 10,631,812 5.6 48,212,794 4.7 2014-15 2.3 35,985,757 2.7 3.3 2013-14 414,452 10,072,231 5.1 46,057,988 405,320 35,024,595 44,608,177 4.1 2012-13 0.8 4.3 9,583,582 3.3 9,275,507 2011-12 402,131 6.7 33,588,149 9.3 3.1 42,863,656 7.9 2010-11 376,939 2.3 30,725,774 3.5 9,000,697 5.8 39,726,471 4.0 2009-10 368,638 1.5 29,697,949 5.9 8,506,012 0.7 38,203,961 4.7

Passenger enplanements and deplanements have increased at a faster rate than scheduled passenger aircraft arrivals and departures because passenger airlines have increased the average size of aircraft serving the Airport, including by reducing the use of regional jets and eliminating the use of turboprops.

^{*} Preliminary.
Source: Commission.

As indicated in the table above, aircraft arrivals and departures and domestic and total passenger traffic declined during Fiscal Y ear 2018–19, as compared to Fiscal Y ear 2017–18, based on preliminary data. The reductions are primarily attributable to Alaska Airlines' post-merger restructuring of its routes, Southwest's decision to expand service at San Jose Airport, as well as domestic gate constraints due to high levels of gate utilization during peak periods. Future additional gate capacity upon completion of the Terminal 1, Boarding Area B renovation is expected to enable airlines to continue to add service. See "AIRLINE TRAFFIC AND ECONOMIC ANALYSIS – Low-Cost Carrier Service" and "Key Factors Affecting Future Airline Traffic-Airline Consolidation and Alliances" in APPENDIX A and "—Airline Service" and "- Current Airport Facilities – Gates."

Passenger traffic grew at a compound annual growth rate of 4.6% from Fiscal Year 2008-09 through 2017–18, with a 7.0% increase in Fiscal Year 2017–18. Passenger traffic declined by 0.5% during Fiscal Year 2018–19, based on preliminary data. While the Commission expects traffic to continue to grow, such growth is likely to be at a more moderate pace than over the last few years.

During Fiscal Year 2018–19, an estimated 81% of the passenger traffic at the Airport was "origin and destination" traffic, where San Francisco is the beginning or end of a passenger's trip. This relatively high percentage of origin and destination traffic is in contrast to many other major airports which have a higher percentage of connecting passengers, largely as a result of airline hubbing practices. Historically, when airlines have reduced or ceased operations at the Airport, other airlines have absorbed the passenger demand with no significant adverse impact on Airport revenues.

Enplanements

Total Enplanements. Total enplanements for the Airport's 10 most active airlines for Fiscal Years 2014–15 through 2018–19 are shown in the table below, ranked in the order of the results from Fiscal Year 2018–19. Enplanements for airlines include enplanements by affiliates.

TOTAL ENPLANEMENTS BY AIRLINE (Fiscal Years)

						% of
Airline	2014–15	2015–16	2016–17	201 <i>7</i> –18	2018–19*	2018–19 ^{*(1)}
United Airlines	10,867,589	11,216,891	11,875,239	12,860,422	13,066,968	45.7%
Alaska Airlines ⁽²⁾	<i>7</i> 25,137	742,284	792,496	1,464,505	3,376,047	11.8
Delta Air Lines	2,023,216	2,105,573	2,080,821	2,157,886	2,219,421	7.8
American Airlines ⁽³⁾	1,476,862	2,119,968	2,204,111	2,198,766	2,175,454	7.6
Southwest Airlines	1,682,298	1,722,390	1,794,989	1,907,453	1,713,578	6.0
jetBlue Airways	602,206	755,398	785,328	805,572	738,297	2.6
Air Canada	388,401	432,354	484,287	545, <i>7</i> 55	567,734	2.0
EVA Airways ⁽⁴⁾				_	282,641	1.0
Cathay Pacific ⁽⁵⁾	_	_	_	258,182	260,286	0.9
Lufthansa Airlines (6)	262,802	_	245,550	255,434	243,861	0.9
Virgin America ⁽²⁾	1,997,367	2,279,332	2,502,709	2,325,380	_	_
Frontier Airlines ⁽⁷⁾	_	343,736	341,903	_	_	_
US Airways ⁽³⁾	878,176	293,408	-	_	-	-
Subtotal	20,904,054	22,011,334	23,107,433	24,779,355	24,644,287	86.1
All others	3,119,545	3,610,1 <i>7</i> 6	3,763,979	4,034,496	3,976,100	13.9
TOTAL	24,023,599	25,621,510	26,871,412	28,813,851	28,620,387	100.0%
Percentage Change	4.5%	6.7%	4.9%	7.2%	(0.7%)	

^{*} Preliminary.

Source: Commission.

As indicated in the table above, enplanements declined by 0.7% during Fiscal Year 2018–19, as compared to the prior Fiscal Year, based on preliminary data. Total enplanements increased in July and August 2018, declined in each month from September 2018 through May 2019, and increased in June 2019, as compared to the same months in the prior fiscal year, all based on preliminary data. See "-Overview" for discussion of some of the reasons for the decline in enplanements for the indicated period.

⁽¹⁾ Figures do not total due to rounding.

⁽²⁾ Alaska Air Group, Inc. and Virgin America, Inc. merged effective December 2016. The merged airline received a single operating certificate from the FAA in January 2018. The merged airline moved to a single reservations system on April 25, 2018, and has adopted Alaska's name and logo and retired the Virgin America brand. All operations of the merged carrier at the Airport have been recorded as Alaska Airlines operations since April 2018.

⁽³⁾ On December 9, 2013, American Airlines and US Airways merged, although they continued to operate under separate FAA operating certificates until April 8, 2015, when American Airlines received a single operating certificate from the FAA. US Airways continued to report operations separately until October 2015.

⁽⁴⁾ EVA Airways served the Airport in Fiscal Years 2014–15 through 2017–18, but was not among the top 10 most active airlines in terms of total enplanements for those years.

⁽⁵⁾ Cathay Pacific served the Airport in Fiscal Years 2014–15 through 2016–17, but was not among the top 10 most active airlines in terms of total enplanements for those years.

⁽⁶⁾ Lufthansa served the Airport in Fiscal Year 2015-16, but was not among the top 10 most active airlines in terms of total enplanements.

⁽⁷⁾ Frontier Airlines served the Airport in Fiscal Years 2014–15, 2017–18 and 2018–19, but was not among the top 10 most active airlines in terms of total enplanements for those years.

<u>Domestic Enplanements</u>. Domestic enplanements for the 10 most active airlines for Fiscal Years 2014–15 through 2018–19, ranked in the order of the results from Fiscal Year 2018–19, are shown in the table below. Enplanements for airlines include enplanements by affiliates.

DOMESTIC ENPLANEMENTS BY AIRLINE (Fiscal Years)

Airline	2014-15	2015–16	2016-17	2017-18	2018–19 [*]	% of 2018–19* ⁽¹⁾
United Airlines	9,016,438	9,353,580	9,884,799	10,755,903	10,746,159	50.4%
Alaska Airlines ⁽²⁾	658,480	670,884	701, 7 85	1,363,302	3,261,369	15.3
Delta Air Lines	2,023,216	2,105,5 <i>7</i> 3	2,080,821	2,157,886	2,219,421	10.4
American Airlines ⁽³⁾	1,476,862	2,119,968	2,204,111	2,198,766	2,175,454	10.2
Southwest Airlines	1,682,298	1,722,390	1,794,989	1,907,453	1,713,578	8.0
jetBlue Airways	602,206	755,398	785,328	805,572	738,297	3.5
Hawaiian Airlines	134,713	172,448	188,550	191,827	187,805	0.9
Frontier Airlines	229,093	343,736	341,903	223,728	1 <i>7</i> 3,520	0.8
Sun Country Airlines	_	_	82,257	85,788	85,440	0.4
Virgin America ⁽²⁾	1,997,367	2,279,332	2,502,709	2,264,806	_	_
US Airways ⁽³⁾	878,176	293,408	_	-	_	-
Subtotal	18,655,975	19,762,344	20,513,587	21,955,031	21,301,043	100.0%
All others	93,822	82,647	304	0	0	0
Total	18,749,797	19,844,991	20,513,891	21,955,031	21,301,043	100.0%
Percentage Change	4.2%	5.8%	3.4%	7.0%	(3.0%)	

^{*} Preliminary.

Source: Commission.

As indicated in the table above, domestic enplanements decreased by 3.0% in Fiscal Year 2018–19, as compared to Fiscal Year 2017–18, based on preliminary data. Domestic enplanements increased in July and August 2018, and declined in each month from September 2018 through June 2019, as compared to the same months in the prior Fiscal Year. See "-Overview" for discussion of some of the reasons for the decline in domestic enplanements for the indicated period.

⁽¹⁾ Column does not total due to rounding.

⁽²⁾ Alaska Air Group, Inc. and Virgin America, Inc. merged effective December 2016. The merged airline received a single operating certificate from the FAA in January 2018. The merged airline moved to a single reservations system on April 25, 2018, and has adopted Alaska's name and logo and retired the Virgin America brand. All operations of the merged carrier at the Airport have been recorded as Alaska Airlines operations since April 2018.

⁽³⁾ On December 9, 2013, American Airlines and US Airways merged, although they continued to operate under separate FAA operating certificates until April 8, 2015, when American Airlines received a single operating certificate from the FAA. US Airways continued to report operations separately until October 2015.

<u>International Enplanements</u>. International enplanements for the 10 most active airlines for Fiscal Y ears 2014–15 through 2018–19, ranked in the order of the results from Fiscal Y ear 2018–19 are shown in the table below. Enplanements for airlines include enplanements by affiliates.

INTERNATIONAL ENPLANEMENTS BY AIRLINE (Fiscal Years)

Airline	2014–15	2015-16	2016-17	2017-18	2018–19*	% of 2018–19* ⁽¹⁾
United Airlines	1,851,151	1,863,311	1,990,440	2,104,519	2,320,809	31.7%
Air Canada	388,401	432,354	484,287	545, 7 55	567,734	7.8
EVA Airways	192,962	198,194	201,606	239,811	282,641	3.9
Cathay Pacific Airlines	205,483	227,845	241,381	258,182	260,286	3.6
Lufthansa Airlines	262,802	252,879	245,550	255,434	243,861	3.3
British Airways	217,643	236,205	223,556	220,552	222,770	3.0
Air France	159,143	178,248	1 <i>7</i> 8,767	174,842	174,620	2.4
Singapore Airlines	166,875	169,083	166,569	157,949	169,227	2.3
Korean Air Lines ⁽²⁾	_	_	_	163,1 <i>7</i> 3	165,146	2.3
Aeromexico ⁽³⁾	132,009	_	150,137	162,642	158,105	2.2
Virgin Atlantic						
Airways ⁽⁴⁾	_	148,712	142,123	_	_	-
Emirates ⁽⁵⁾	135,387	145,157	_	_	_	-
Subtotal	3,711,856	3,851,988	4,024,416	4,282,859	4,565,199	62.4
All others	1,561,946	1,924,531	2,333,105	2,575,961	2,754,145	37.6
Total	5,273,802	5,776,519	6,357,521	6,858,820	7,319,344	100.0%
Percentage Change	5.3%	9.5%	10.1%	7.9%	6.7%	

^{*} Preliminary.

Source: Commission.

In Fiscal Year 2018-19, enplanements to Asia and the Middle East increased by 5.8%; enplanements to Canada increased by 5.4%; enplanements to Europe increased by 11.2%; enplanements to Latin America decreased by 4.8%; and enplanements to Australia and Oceania increased by 23.2%, all as compared to Fiscal Year 2017-18, based on preliminary data.

⁽¹⁾ Column does not total due to rounding.

⁽²⁾ K orean Airlines served the Airport in Fiscal Years 2014–15 through 2016–17, but was not among the top 10 most active airlines in terms of international enplanements in those years.

⁽³⁾ Aeromexico served the Airport in Fiscal Y ear 2015–16, but was not among the top 10 most active airlines in terms of international enplanements for those years.

⁽⁴⁾ Virgin Atlantic Airways served the Airport in Fiscal Years 2014–15, 2017–18 and 2018–19, but was not among the top 10 most active airlines in terms of international enplanements during that year.

⁽⁵⁾ Emirates served the Airport in Fiscal Years 2016–17 and Fiscal Year 2017–18, but was not among the top 10 most active airlines in terms of international enplanements for those periods.

International enplanements by destination for Fiscal Years 2014-15 through 2018-19 are shown in the following table.

INTERNATIONAL ENPLANEMENTS BY DESTINATION (Fiscal Years)

						% of 20	18–19* ⁽¹⁾
Destination	2014-15	2015-16	2016–17	2017-18	2018–19*	International Enplanements	Total Enplanements
Asia/Middle East	2,315,144	2,497,726	2,712,712	2,922,171	3,090,886	42.2%	10.8%
Europe	1,473,694	1,637,439	1,750,817	1,862,789	2,071,317	28.3	7.2
Canada	736,844	<i>777</i> ,915	794,558	869,925	917,096	12.5	3.2
Latin America	555,266	636,359	790,072	867,883	825,965	11.3	2.9
Australia/Oceania	192,854	227,080	309,362	336,052	414,080	5.7	1.4
Total	5,273,802	5,776,519	6,357,521	6,858,820	7,319,344	100.0%	25.6%
Percentage Change	5.3%	9.5%	10.1%	7.9%	6.7%		

^{*} Preliminary.

Source: Commission.

Cargo Traffic and Landed Weight

Cargo Traffic

In Fiscal Year 2018–19, according to traffic reports submitted by the airlines, Airport air cargo volume (on and off) was approximately 564,521 metric tons, including U.S. mail, freight and express shipments, an increase of 3,371 metric tons (0.6%) compared to reported cargo volume for Fiscal Year 2017–18, based on preliminary data. A total of approximately 362,824 metric tons was international cargo, mail, freight and express shipments (an increase of 2.8% compared to Fiscal Year 2017–18) and approximately 201,697 metric tons was domestic cargo, mail, freight and express shipments (a decrease of 3.1% compared to Fiscal Year 2017–18), based on preliminary data. The Airport was ranked 15th in the United States in terms of air cargo volume in calendar year 2017, according to data from ACI. Cargo volume can vary depending on a number of factors including, but not limited to, the local and global economies, fuel prices, tariffs on shipments, and labor issues at shipping ports.

In Fiscal Year 2017–18, according to traffic reports submitted by the airlines, Airport air cargo volume (on and off) was approximately 561,150 metric tons, including U.S. mail, freight and express shipments, an increase of 25,569 metric tons (4.8%) compared to reported cargo volume for Fiscal Year 2016–17. Compared to Fiscal Year 2016–17, domestic cargo and mail traffic tonnage decreased 883 metric tons (0.4%) and international cargo and mail traffic tonnage increased 26,452 metric tons (8.1%) during Fiscal Year 2017–18.

The following table provides combined domestic and international cargo traffic information for the Airport for the Fiscal Years 2014–15 through 2018–19.

AIR CARGO ON AND OFF (in metric tons)

Fiscal Year	Freight and Express	U.S. and Foreign Mail	Total Cargo ⁽¹⁾	Percent Change
2018–19 [*]	497,473	67,047	564,521	0.6%
2017–18	488,526	72,624	561,150	4.8
2016–17	466,923	68,659	535,581	18.6
2015–16	383,305	68,196	451,501	2.2
2014–15	383,351	58,447	441,797	19.2

^{*} Preliminary.

Source: Commission.

⁽¹⁾ Columns do not total due to rounding.

⁽¹⁾ Totals may not add due to rounding.

Landed Weight

Landing fees paid by each airline are based on landed weights of aircraft operating at the Airport. The revenue landed weights for the 10 most active airlines operating at the Airport for Fiscal Y ears 2014–15 through 2018–19, ranked in the order of the results from Fiscal Y ear 2018–19, are shown in the table on the following page. Landed weights for airlines include landed weight of affiliates.

TOTAL REVENUE LANDED WEIGHT BY AIRLINE (in thousands of pounds) (Fiscal Years)

Airline	2014–15	2015–16	2016–17	2017–18	2018–19*	% of 2018–19*(1)
United Airlines	13,587,731	13,953,205	15,453,760	16,315,849	16,555,781	42.1%
Alaska Airlines ⁽²⁾	827,323	874,199	930,717	2,694,093	3,949,910	10.0
American Airlines(3)	1,802,575	2,462,970	2,654,816	2,562,887	2,589,043	6.6
Delta Air Lines	2,350,648	2,567,319	2,525,718	2,579,834	2,555,766	6.5
Southwest Airlines	1,872,090	1,895,646	2,038,119	2,188,500	1,946,440	4.9
jetB lue Airways	672,117	875,867	939,439	1,011,057	902,658	2.3
Air Canada	492,160	546,720	640,396	700,161	794,984	2.0
Korean Air Lines ⁽⁴⁾	_	_	542,308	648,994	649,509	1.7
Cathay Pacific ⁽⁵⁾	_	_	_	523,393	559,497	1.4
Lufthansa Airlines	503,285	501,143	510,879	_	516,270	1.3
Virgin America ⁽²⁾	2,424,728	2,757,501	2,996,660	1,787,582	_	
British Airways ⁽⁶⁾	_	506,376	_	_	_	_
US Airways ⁽³⁾	921,285	_	_	_	_	_
SUBTOTAL	25,453,942	26,940,946	29,232,812	31,012,904	31,019,858	78.8
All others	7,156,110	8,072,361	8,363,816	8,521,518	8,343,850	21.2
TOTAL	32,610,052	35,012,485	37,596,628	39,534,422	39,363,708	100.0%
Percentage Change	3.1%	7.4 %	7.4%	5.2%	(0.4%)	

^{*} Preliminary.

Source: Commission.

As indicated in the table above, total revenue landed weight at the Airport decreased 0.4% during Fiscal Year 2018–19 as compared to Fiscal Year 2017–18, based on preliminary data. Landed weight increased in July 2018 and declined in each month from August 2018 through June 2019, as compared to the same months in the prior fiscal year, based on preliminary data. See "-Overview" for discussion of some of the reasons for the decline in landed weight for the indicated period.

Column does not total due to rounding.

⁽²⁾ Alaska Air Group, Inc. and Virgin America, Inc. merged effective December 2016. The merged airline received a single operating certificate from the FAA in January 2018. The merged airline moved to a single reservations system on April 25, 2018, and has adopted Alaska's name and logo and retired the Virgin America brand. All operations of the merged carrier at the Airport have been recorded as Alaska Airlines operations since April 2018.

⁽³⁾ On December 9, 2013, American Airlines and US Airways merged, although they continued to operate under separate FAA operating certificates until April 8, 2015, when American Airlines received a single operating certificate from the FAA. US Airways continued to report operations separately until October 2015. US Airways served the Airport in Fiscal Year 2015–16, but was not among the top 10 most active airlines in terms of revenue landed weight.

⁽⁶⁾ K orean Air Lines served the Airport in Fiscal Y ears 2014-15 and 2015-16, but was not among the top 10 most active airlines in terms of revenue landed weight for those years.

⁽⁷⁾ Cathay Pacific served the Airport in Fiscal Y ears 2014–15 through Fiscal Y ear 2016–17, but was not among the top 10 most active airlines in terms of revenue landed weight for those periods.

⁽⁸⁾ British Airways served the Airport in Fiscal Years 2014–15, and 2016–17 through 2018–19, but was not among the top 10 most active airlines in terms of revenue landed weight for those periods.

Competition

General

The Airport is the principal airport in the San Francisco B ay Area and one of three international gateways on the U.S. West Coast. The San Francisco B ay Area is also served by the Oakland Airport and the San Jose Airport. The other two international gateways on the U.S. West Coast are the Los Angeles Airport and the Seattle Airport. The passenger traffic data with respect to the Los Angeles Airport, the Oakland Airport, the San Jose Airport, the Oakland Airport, the San Jose Airport and the Seattle Airport, the San Jose Airport and the Seattle Airport, respectively.

The Commission expects the Airport to continue to be the major air traffic center for the San Francisco B ay Area based on air traffic projections, the substantial investment by a number of major airlines at the Airport, terminal facility improvements and passenger preferences stemming from the Airport's location, service and frequent flights to domestic and international destinations.

Substantially all of the international passenger traffic in the San Francisco B ay Area is at the Airport. Thus, the primary competitor of the Airport on the West Coast for international passengers is the Los Angeles Airport, rather than Oakland Airport or San Jose Airport. During Fiscal Y ear 2017–18, international passenger traffic (enplanements and deplanements) at the Airport totaled approximately 13.8 million (an increase of 6.9% over the prior Fiscal Y ear) compared to approximately 26.0 million at Los Angeles Airport (an increase of 6.6%). The choice by air carriers between the Airport and Los Angeles Airport for their international routes is affected by many factors, including the much larger population served by Los Angeles Airport, and the distance of each airport from various destinations.

In 2014, Delta Air Lines announced that the creation of an international gateway in Seattle was among its network strategies. By 2016, Delta Air Lines' Chief Executive Officer indicated that facility constraints at the Seattle Airport would limit growth until new facilities come online, notably a planned new international arrivals facility that is expected to be completed in 2020. In Fiscal Year 2017–18 its international enplanements and deplanements totaled 5.3 million compared to 13.8 million at the Airport. Delta Air Lines ceased its international service at the Airport in March 2014.

Passenger Traffic

According to traffic reports released by the three San Francisco B ay Area airports for Fiscal Y ear 2017–18, the Airport accounted for approximately 63.7% of total domestic passenger traffic and approximately 88.3% of total international passenger traffic. The combined total passenger traffic increase at the three B ay Area airports during Fiscal Y ear 2017–18 was 6.5 million enplanements and deplanements (approximately 8.3%) higher than in Fiscal Y ear 2016–17. While the Airport's enplanements and deplanements increased by 7.0%, Oakland Airport increased by 6.1% and San Jose Airport increased by 17.2%, resulting in a slight decrease in market share for the Airport, from 69.1% in Fiscal Y ear 2016–17 to 68.3% in Fiscal Y ear 2017–18.

The following table summarizes comparative passenger traffic data at the three B ay Area airports for Fiscal Years 2013–14 through 2017–18.

COMPARISON OF BAY AREA AIRPORTS TOTAL PASSENGER TRAFFIC (Enplanements and Deplanements) (Fiscal Years)

					2017–18	
Airport	2013-14	2014-15	2015–16	2016–17	Number	% Change
San Francisco	46,057,988	48,212,794	51,409,232	53,969,058	57,747,186	7.0%
Oakland	9,890,271	10,754,556	11,614,845	12,593,371	13,356,803	6.1
San Jose	9,063,012	9,554,866	10,213,261	11,514,425	13,490,514	17.2
Total Bay Area	65,011,272	68,522,216	73,237,338	78,076,854	84,594,503	8.3%
Percentage Change	3.1%	5.4%	6.9%	6.6%	8.3%	

Sources: Commission, the Metropolitan Oakland International Airport and the Norman Y. Mineta San Jose International Airport.

Air Cargo

During Fiscal Year 2017–18, the Airport accounted for approximately 46.2% of total air cargo at the three San Francisco Bay Area airports, compared with 47.5% in Fiscal Year 2016–17. Oakland Airport accounted for approximately 49.3% and San Jose accounted for approximately 4.6% of the total air cargo in the Bay Area during Fiscal Year 2017–18. The Airport handled approximately 26.4% of domestic loaded and unloaded cargo and approximately 82.7% of the Bay Area's international loaded and unloaded air cargo. Oakland Airport had the largest share of the domestic air cargo market (approximately 66.6% compared to approximately 65.5% during Fiscal Year 2016–17). This is attributable to its traffic in express package shipments, an activity that requires significant land area that is not available at or in the vicinity of the Airport. The Airport experienced an increase in international cargo (including mail) of 26,452 tons (8.1%) compared to Fiscal Year 2016–17, and a decrease in domestic cargo (including mail) of 883 tons (0.4%) over the same period, resulting in an overall increase of 25,569 tons (4.8%). During Fiscal Year 2017–18, Oakland Airport experienced an increase in total cargo of 62,356 tons (11.6%) and San Jose Airport experienced an increase in total cargo of 105 tons (0.2%) each compared to Fiscal Year 2016–17. As a result, the Airport experienced a 1.3 percentage point decrease in cargo tonnage market share, while Oakland Airport had an increase in cargo tonnage market share of 0.3 percentage points.

The following table summarizes comparative air cargo data at the three B ay Area airports for Fiscal Y ears 2013–14 through 2017–18.

COMPARISON OF BAY AREA AIRPORTS TOTAL AIR CARGO (in metric tons) (Fiscal Years)

					201	7–18
Airport	2013-14	2014-15	2015–16	2016-17	Number	% Change
San Francisco	370,525	441, <i>7</i> 97	451,501	535,581	561,150	4.8
Oakland	520,486	539,030	543,880	536,826	599,182	11.6
San Jose	46,961	47,177	52,822	55,337	55,446	0.2
Total Bay Area*	937,972	1,028,005	1,048,203	1,127,745	1,215,779	7.8%
Percentage Change	3.9%	9.6%	2.0%	7.6%	7.8%	

Sources: Commission, the Metropolitan Oakland International Airport and the Norman Y. Mineta San Jose International Airport. * Totals may not add due to rounding.

Airline Agreements

As of June 1, 2019, the City and 46 of the airlines that served the Airport in the first eleven months of Fiscal Year 2018–19 were party to Lease and Use Agreements that became effective on and after July 1, 2011 (the "Lease and Use Agreements") following the expiration of prior lease and operating agreements with the airlines. The airlines that are party to a Lease and Use Agreement are referred to as "Signatory Airlines." Non-signatory airlines operate at the Airport under month-to-month operating permits or on an itinerant basis. A brief description of certain major

terms of the Lease and Use Agreements follows. For a more detailed summary of the Lease and Use Agreements, see APPENDIX E-"SUMMARY OF CERTAIN PROVISIONS OF THE LEASE AND USE AGREEMENTS." For information on which airlines currently serving the Airport are party to the Lease and Use Agreements, see the table entitled "Air Carriers Reporting Air Traffic at the Airport" under "-Airline Service" above.

Lease and Use Agreements

<u>Signatories</u>. The Lease and Use Agreements took effect on July 1, 2011 and expire on June 30, 2021. Sixteen of the airlines that reported traffic on scheduled passenger flights in the first eleven months of Fiscal Year 2018–19 were non-signatory as of June 1, 2019. Four are affiliates that report traffic under their respective signatories. The remaining twelve airlines' passengers comprised less than 1.5% of the Airport's total passengers in the month of May 2019. Airlines in addition to the current Signatory Airlines may sign the Lease and Use Agreement from time to time.

Residual Methodology. The Lease and Use Agreements govern the use of terminal, baggage claim, ticketing, ramp and gate areas. Under the Lease and Use Agreements, the Signatory Airlines pay terminal rents and landing fees under a residual rate-setting methodology tied to specified cost centers. This methodology is designed to provide revenues to the Commission sufficient to pay operating expenses and debt service costs. Under the residual rate-setting methodology, landing fees and terminal rentals are established each year to produce projected revenues from the airlines ("airline payments") equal to the difference between (i) the Airport's non-airline revenues and (ii) the Airport's total costs, including without limitation operating expenses, debt service costs and the Annual Service Payment described under "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City-Annual Service Payment" ("net costs"). In other words, rates and charges are established each year to produce projected airline payments equal to projected net costs. Thus, increases in non-airline revenues, such as parking and concession revenues, generally result in decreases in airline landing fees and terminal rental rates, and vice versa.

Differences between actual revenues and expenditures and amounts estimated in the calculation of airline fees and charges for any Fiscal Year result in adjustments of terminal rentals and landing fees in subsequent Fiscal Years. Such differences are recorded on the statements of net position in the financial statements of the Airport in the Fiscal Year to which such differences pertain. Net overcharges are recorded as liabilities and net undercharges are recorded as assets.

Annual Adjustment of Terminal Rentals and Landing Fees. The Commission may adjust terminal rental rates and landing fees each year for the next Fiscal Year based on each Signatory Airline's proposed changes to its leased space, additions of new terminal space for lease, the forecast landed weight for the next Fiscal Year, and the Commission's budgetary forecast of attributed non-airline revenues, operating expenses and debt service costs for the various Airport cost centers.

Mid-Y ear Adjustment of Terminal Rentals and Landing Fees. The Commission may increase terminal rental rates and/or landing fees at any time during the Fiscal Y ear if the actual expenses (including debt service) in one or more applicable cost centers are projected to exceed by 10% or more the actual revenues from such cost center. Prior to increasing terminal rental rates and/or landing fees, as applicable, the Commission must use commercially reasonable efforts to provide a 60-day notice to, and consult with, the Signatory Airlines. The Signatory Airlines are required to pay such increased terminal rentals and/or landing fees sufficient to cover the projected deficiency for the remaining months of the then-current Fiscal Y ear. The Airport has not made any such mid-year adjustments since Fiscal Y ear 2000-01.

Terminal Rentals and Landing Fees. Landing fees, consisting of minimum fees for fixed-wing and rotary aircraft and a rate based on landed weight, are imposed primarily with respect to Airfield Area and Airport Support Area net costs. Each Signatory Airline and other airlines and airfield users are required to pay landing fees, the principal component of which is based upon landed weight, that are established by the Commission to fully recover all Airfield and Airport Support Area net costs. Airlines that are not Signatory Airlines or an Affiliate Airline (as defined in the Lease and Use Agreements) of a Signatory Airline pay a 25% premium on landing fees. If a Signatory Airline ceases or substantially reduces its operations at the Airport, it remains liable for certain terminal rentals calculated each year on a residual basis. Any shortfall in landing fees payable to the Commission by the Signatory Airlines and other airlines and airfield users in any Fiscal Year as a result of actual landed weights being less than those projected are made up either from a mid-year rate adjustment, or from adjustments to landing fee rates in the succeeding Fiscal Years.

<u>Funding of Capital Improvements</u>. The Commission, subject to the limited exception described below, must use commercially reasonable efforts to finance all capital improvements through grants, TSA funding, PFCs or the issuance of Airport revenue bonds. However, the Commission may annually budget for capital improvements from current revenues up to \$4,200,000 in Fiscal Y ear 2008-09 dollars (\$5,100,000 in Fiscal Y ear 2019-20 dollars, based on the Implicit Price Deflator), or a greater amount approved by a Majority-In-Interest of the Signatory Airlines (defined as more than 50% of the Signatory Airlines, which on the date of calculation represent more than 50% of the landed weight of such Signatory Airlines during the immediately preceding Fiscal Y ear).

Airline Review of Capital Improvements. The Commission is required to notify the Signatory Airlines in writing of most proposed capital improvements that exceed the Majority-In-Interest review dollar threshold established in the Lease and Use Agreement. Within 45 days of the receipt of such notice, if a Majority-In-Interest objects to a capital improvement, the Airport may not proceed with the capital improvement for a period specified by the Signatory Airlines, but not to exceed six months. During that time, the airlines may develop and present their opposition to the capital project to the Commission at a public hearing or otherwise. At the end of the specified period, the Commission may proceed with the capital improvement. Capital improvements that are (i) required by a federal or state agency having jurisdiction over Airport operations, (ii) required by an emergency which, if the improvements are not made, would result in the closing of the Airport within 48 hours, or (iii) financed by the issuance of Special Revenue B onds, are not subject to the airline review requirement. "Special Revenue B onds" are obligations issued by the Commission or on behalf of the Airport, the debt service on which is payable from or secured in whole or substantial part by revenues other than Revenues, and include Special Facility B onds. While some projects in the current Capital Improvement Plan still require airline review, the Commission has completed the airline review process for outstanding qualifying projects well in excess of the proceeds of the proposed Series 2019E B onds, Series 2019F B onds and Series 2019G B onds.

Joint Use of Space. Gates in the domestic terminals are used by airlines on a preferential or common-use basis while gates in the ITC are used on a common or joint use basis. Gates assigned to an airline for preferential use are allocated annually according to a formula taking into account each airline's actual seats in the preceding month of August. Gates can thus be recaptured by the Airport annually from airlines with decreasing traffic and allocated to other airlines with increasing traffic. Any preferential use gate can also be used by any airline when it is not actively being used by the airline to which it is allocated. With respect to the domestic terminals, the Airport may recapture unneeded support facilities from a Signatory Airline at any time if the number of preferential use gates allocated to such airline is reduced. These provisions allow the Airport to continue receiving terminal rentals on unused support facilities until they are needed by another airline. With respect to the ITC, most ITC gates, holdrooms, ticket counters and baggage systems (including the baggage system at domestic Terminal 2) are leased to a group of airlines on a joint use basis and allocated for use among the various airlines as needed during the day in accordance with management protocols. Rental charges for joint use facilities are based on a formula, with 80% of the charges allocated pro rata to the airlines based on passenger levels, and 20% shared equally by the airlines in the group. This arrangement facilitates the efficient use of the ITC facilities and enables the Airport to accommodate new domestic or international carriers or other market changes within the industry. A small number of domestic terminal and ITC gates and related facilities are designated for common use to accommodate itinerant airlines and overflow domestic departures and arrivals. Fees for common use facilities are charged on a per-turn basis.

<u>Security Deposit</u>. Each Signatory Airline is required to post security with the Commission to guaranty its performance and payment. Such security may consist of a surety bond, a letter of credit or another form of security acceptable to the Commission in an amount equal to two months of terminal area rentals, landing fees, and usage fees. Airlines operating at the Airport pursuant to ground leases or 30-day permits are required to post security bonds or letters of credit in an amount ranging from two to six months estimated rentals under such agreements.

<u>Cross-Default Provisions</u>. A Signatory Airline may have more than one agreement, lease or permit with the Airport. If a default occurs under any one of such other agreements, a cross-default is triggered under the Signatory Airline's Lease and Use Agreement. In addition, if a Signatory Airline is in default under its Lease and Use Agreement, the Airport may terminate any other agreement with such Signatory Airline.

Expiration of the Lease and Use Agreements. Upon the expiration of the Lease and Use Agreements on June 30, 2021, the Commission will have various options, including (a) extending the long-term agreements, (b) negotiating new long-term agreements, (c) entering into month-to-month agreements under the holdover provisions of the existing Lease and Use Agreements, or (d) not entering into new agreements and setting rates and charges by resolution. See "Holding Over" in APPENDIX E-"SUMMARY OF CERTAIN PROVISIONS OF THE LEASE AND USE AGREEMENTS." The

Commission expects to begin negotiations for a successor lease and use agreement with the airlines later in calendar year 2019, and expects them to conclude before the end of the current Lease and Use Agreements in June 2021. In any event, the Commission intends to continue to establish rates and charges that will comply with the requirements of the rate covenant under the 1991 Master Resolution and that will allow the continued safe and efficient operation of the Airport and additional capital investment. If the Commission and the airlines do not finalize new or extended agreements by the time the existing Lease and Use Agreements expire, the Commission intends to set cost-recovery based rates and charges by resolution that are consistent with the requirements of the 1991 Master Resolution and any applicable parameters established by the FAA and the U.S. DOT. The Commission cannot impose a residual rate-setting system without the agreement of the airlines. However, the Commission cannot predict what form any new agreements may take, whether the existing residual rate-setting system will be continued or whether the balance of risks and benefits between the Commission and the airlines will be the same as in the current Lease and Use Agreement.

Potential Effects of an Airline Bankruptcy

In the event a bankruptcy case is filed with respect to an airline operating at the Airport, the lease or permit governing such airline's use of Airport space would constitute an executory contract or unexpired lease pursuant to the United States Bankruptcy Code. A trustee in bankruptcy or the airline as debtor in possession may keep ("assume") or jettison ("reject") any executory contracts or unexpired leases of non-residential real property. Under the B ankruptcy Code, upon rejection of an unexpired lease, the airline debtor must surrender non-residential real property to the lessor. As a result, rejection of an unexpired lease by an airline debtor may result in the Commission regaining control of the applicable facilities (including gates and boarding areas), which the Commission could then lease or permit such facilities to other airlines. The Commission's ability to lease such facilities to other airlines may depend on the state of the airline industry in general, on the nature and extent of the increased capacity at the Airport resulting from the departure of the debtor airline, and on the need for such facilities. Alternatively, under the Bankruptcy Code an airline debtor can "assume" its executory contracts and unexpired leases. The Bankruptcy Code further provides for an airline debtor to assume and assign its executory contracts and leases, subject to certain conditions. If the bankruptcy trustee or the airline assumes an executory contract or unexpired lease as part of a reorganization, the airline debtor must "cure" or provide adequate assurance that the airline debtor will promptly cure its prepetition defaults, including arrearages in amounts owed. Even if all such amounts owed are eventually paid, the Commission could experience delays of many months or more in collecting such amounts.

Amounts under a nonresidential lease arising from or after the bankruptcy petition must be paid when due unless the bankruptcy court extends the time for performance, but the court cannot extend such time more than 60 days from the date the petition is filed. Amounts accruing during the case generally have administrative expense priority, but such priority does not ensure that such amounts will be paid.

In Chapter 11 cases, the debtor in possession or a trustee, if one is appointed, has 120 days from the date of filing of the bankruptcy petition to decide whether to assume or reject a nonresidential lease, such as a Lease and Use Agreement. The 120-day period may be extended by court order for an additional 90 days for cause. Any additional extensions are prohibited unless the debtor airline or trustee obtains the Airport's consent and a court order.

Under the Bankruptcy Code, any rejection of a lease could result in a claim by the Airport for lease rejection damages against the debtor airline. Such claimwould be in addition to all pre-bankruptcy amounts owed by the debtor airline. A rejection damages claim is for the rent coming due under the lease in the future and is capped under the Bankruptcy Code at the greater of one year, or 15%, not to exceed three years, of the remaining term of the lease. A rejection damages claim is generally treated as a general unsecured claim of the airline debtor. However, the Airport may have rights against any faithful performance bond or letter of credit required of an airline to secure its obligations under the Airport agreements or the right to set off against credits owed to the airline under the Airport agreements.

There can be no assurance that all claim amounts could be collected if an airline rejects its Lease and Use Agreement in connection with a bankruptcy proceeding. In addition, in the event an airline rejects its lease and use agreements, the Airport may be required to repay landing fees and terminal rentals paid by the airline in the 90-day period prior to the date of the bankruptcy filing, since such payments are treated as "preferential" and may be avoidable under the Bankruptcy Code. Such avoidance may be subject to defenses however, including payment in the ordinary course and subsequent new value.

Even if a debtor airline assumes its lease while in Chapter 11 reorganization, a bankruptcy trustee could reject the assumed lease if the case were subsequently converted to a liquidation case under Chapter 7 of the Bankruptcy Code. In that event, the Airport's claim against the bankruptcy estate would be treated as an administrative expense claim limited to all sums due under the lease for the two-year period following the later of the rejection date or the date of the actual turnover of the premises. Any remaining amounts due under the lease would be treated as a general unsecured claim limited to the greater of one year of rent reserved under the lease or 15% of the rent for the remaining lease term, not to exceed three years of rent.

Also see "CERTAIN RISK FACTORS-Bankruptcy of Airlines Operating at the Airport."

Certain Federal and State Laws and Regulations

Federal Law Prohibiting Revenue Diversion

Federal law requires that all revenues generated by a public airport be expended for the capital or operating costs of the airport, the local airport system, or other local facilities which are owned or operated by the airport owner or operator and directly and substantially related to the air transportation of passengers or property. In February 1999, the FAA adopted its "Policies and Procedures Concerning the Use of Airport Revenue" (the "Final Policy") clarifying the application of these principles to airport sponsors that receive federal grants for airport development from the FAA, including the Airport. The City is the "sponsor" of the Airport for purposes of these federal requirements. The FAA is currently conducting a financial compliance review of the Airport covering Fiscal Y ears 2011–12 through 2017–18. The purpose of the review is to verify that the Airport and the City are in compliance with the Final Policy. The FAA review is ongoing, and the Commission cannot predict the outcome of the review.

Examples of unlawful revenue diversion include using airport revenues for: (1) land rental to, or use of land by, the sponsor for non-aeronautical purposes at less than the fair market rate; (2) impact fees assessed by any governmental body that exceed the value of services or facilities provided to the airport; or (3) direct subsidies of air carrier operations. An otherwise unlawful revenue diversion may be "grandfathered" if such use was instituted pursuant to a law controlling financing by the airport owner or operator, or a covenant or assurance in a debt obligation issued by the airport owner, prior to September 1982. The Final Policy acknowledges that the Commission's Annual Service Payment to the City's General Fund is "grandfathered" as a lawful revenue diversion. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City-Annual Service Payment" for further description of the Annual Service Payment. The U.S. Congress could revoke the "grandfathering" of the Annual Service Payment. Also see APPENDIX E-"SUMMARY OF CERTAIN PROVISIONS OF THE LEASE AND USE AGREEMENTS-Event of Default; Termination or Suspension of Lease and Use Agreement Provisions-Commission's Right to Suspend Part of Lease and Use Agreement."

The Commission makes substantial payments to the City, separate from and in addition to its Annual Service Payment, for direct services provided to the Airport by other City departments. The FAA has authority to audit the payments and to order the City to reimburse the Airport for any improper payments made to the City, and the Office of Inspector General ("OIG") of U.S. DOT has authority to audit the FAA's oversight of the payments. The FAA may also suspend or terminate pending FAA grants to the Airport and/or any then-existing PFC authorizations as a penalty for any violation of the revenue diversion rules. In addition, the U.S. DOT may also withhold non-aviation federal funds that would otherwise be made available to the City as a penalty for violation of the revenue diversion rules (for example, grants to the City's municipal railway system). In April 2018, OIG concluded an audit to assess FAA's oversight of "grandfathered" airports' compliance with federal law related to airport revenue payments. The Airport was one of the airports included in this OIG audit. The OIG found inaccuracies in the FAA's records, including that the FAA over-reported total grandfathered payments by the Commission. The audit included findings and recommendations to improve the accuracy of FAA's data regarding grandfathered payments, and the FAA concurred in OIG's recommendations. See also "AIRPORT's FINANCIAL AND RELATED INFORMATION-Payments to the City" and "CAPITAL PROJECTS AND PLANNING-Federal Grants."

On November 7, 2014, the FAA amended its 1999 Policies and Procedures Concerning the Use of Airport Revenue to confirm that state and local taxes on aviation fuel, whether part of a general sales tax or otherwise, and whether imposed by an airport operator or by state or local taxing authorities, are subject to the federal restrictions on the uses of airport revenue. These restrictions do not apply to taxes in effect on or before December 30, 1987. The FAA's policy amendment became effective on December 8, 2014, but the FAA provided a three-year transition period for state and local governments to comply. The FAA required taxing jurisdictions to submit a plan for compliance by

December 8, 2015, and to implement the plan by December 8, 2017. The FAA's policy amendment also required the Airport to inform state and local taxing entities, including the City, of these provisions and take reasonable actions within its power to influence state and local tax laws to conform to these requirements. The Airport made the required notifications. The City has not submitted a response to the FAA regarding the policy amendment.

The FAA and the State of California Department of Finance (the "State Department of Finance") have exchanged correspondence between November 2015 and December 2017 regarding the FAA's policy amendment and the State's approach to compliance. On May 17, 2019, the FAA sent a letter to the State indicating disapproval of the proposed approach and requiring that the State Department of Finance provide certain information to the FAA within 30 days. The FAA letter also stated that the State Department of Finance's failure to comply could lead to penalties including the withholding of federal financial assistance to airports in the State. On June 11, 2019, the Director of Finance responded to the FAA requesting an additional 30 days to respond to the FAA's May 2019 letter to allow time for further discussion of the FAA's concerns and the State Department of Finance's clarifying questions.

Any sales taxes on aviation fuel sold at the Airport and received by state and local governments that cannot be grandfathered or used in accordance with the FAA's revenue use policy, likely would be returned to the Airport, resulting in a modest amount of additional revenue that cannot be quantified at this time.

Federal Accessibility Law

The Office of Civil Rights of the FAA ("OCR") periodically reviews airports' compliance with federal civil rights laws and accessibility laws. OCR initiated a review of the Airport's compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act in June 2017 and found certain areas of non-compliance. The Commission has responded to the OCR's preliminary recommendations and has already implemented several of the recommendations. The Commission cannot predict the final outcome of the OCR audit but does not expect its implementation of the final recommendations to have a material financial or operational impact.

State Tidelands Trusts

A substantial portion of the land on which the Airport's facilities are located is held in trust by the City and administered by the Commission pursuant to tidelands grants from the State. These grants, accomplished by special State legislation, date to 1943 and 1947. Generally, the use of this land is limited to Airport purposes under the terms of the grants. The Commission may not transfer any of this land, nor lease it for periods of more than 50 years. There are also certain limitations on the use of funds generated from facilities located on this land. However, none of the various restrictions is expected to affect the operations or finances of the Airport. The grants may be subject to amendment or revocation by the State legislature, as grantor of the trust and as representative of the beneficiaries (the people of the State). Under the law, any such amendment or revocation could not impair the accomplishment of trust purposes, or abrogate the existing covenants and agreements between the City, acting by and through the Commission, as trustee, and the Airport's bondholders. The Commission does not anticipate that the State will revoke the tidelands grants.

Current and Possible Regulation Related to Climate Change

Federal and state regulations and international accords pertaining to GHG emissions are expected to affect the Airport, air carriers, and other Airport tenants.

According to the United States Environmental Protection Agency ("EPA"), aircraft account for 12 percent of all U.S. transportation GHG emissions and approximately 3 percent of total U.S. GHG emissions. While in 2016 the EPA finalized an endangerment finding that GHG emissions from "U.S. covered aircraft" cause or contribute to air pollution, triggering the Clean Air Act Section 231's requirement to regulate, aircraft GHG emission standards are not yet proposed and there has been no public EPA action in this area since December 2016. Regulations may be implemented in the future.

In March 2017, the International Civil Aviation Organization ("ICAO"), a specialized agency within the United Nations, adopted GHG carbon neutral growth targets applicable to (i) new aircraft type designs as of 2020 and (ii) new deliveries of current in-production aircraft models from 2023. The global standard includes a cutoff date of 2028 for production of non-compliant aircraft.

In October 2016, the ICAO also passed a market-based mechanism to curb emissions, the Carbon Offsetting and Reduction Scheme for International Aviation ("CORSIA"). CORSIA is comprised of 192 member countries and is designed to achieve carbon-neutral growth for international (but not domestic) civil aviation from 2020 onwards, in three phases. As of July 2, 2018, 73 nations representing 87.7% of international aviation activity, including the United States, indicated they will participate in the pilot (2021–2023), first (2024–2026) and second (2027–2035) phases of CORSIA. While the United States announced its withdrawal from the Paris Agreement of 2016 in 2017, with an effective date of 2020, which would imply a likely withdrawal from CORSIA participation, virtually all U.S.-based airlines agreed to participate in CORSIA, regardless of the United States' position in May 2019. Currently, those participating nations whose aircraft operators undertake international flights are developing a monitoring, reporting and verification (MRV) system for CO2 emissions from international flights. It remains unclear whether CORSIA will have any impact, economically or on climate.

On a state level, California passed the "California Global Warming Solutions Act of 2006," which requires reduction of the statewide level of GHGs to 1990 levels by 2020. In 2016, the California legislature adopted as state law Governor Brown's 2015 Executive Order B-30-15, requiring a reduction of the Statewide level of GHGs to 40 percent below 1990 levels by 2030. Further, the California Air Resources Board ("CARB") implemented the "California Cap-and-Trade Program" (the "Program") for certain entities emitting 25,000 metric tons of carbon dioxide equivalent per year or more, with non-covered entities allowed to voluntarily participate. Entities emitting between 10,000 and 25,000 metric tons (including the Airport) are required to report stationary source emissions, but are not required to participate in the Program. The Program, and additional State and local regulations related to climate change (including CARB's Low Carbon Fuel Standard, California's State Implementation Plan, the Sustainable Freight Action Plan, and regional GHG Emissions Reduction Targets) may require the airlines serving the Airport, other Airport tenants, and on-Airport operations to meet new compliance obligations that increase operational, utility and fuel costs (such as those pending at CARB regarding ground support equipment and airport shuttle buses). In some cases, these policies provide financial incentives for GHG reduction or air quality improvements through expanded or improved infrastructure and/or vehicle electrification or alternative fuels replacement. In other cases, they prevent the airport, equipment owner, or operator from accessing grants where a key eligibility requirement is that an investment must be voluntary. Additional regulations on a State and local level are pending and foreseeable (including expanding emissions mitigation measures aimed at commercial airports).

State Proposition 218

In November 1996, the voters of the State approved Proposition 218, known as the "Right to Vote on Taxes Act." Proposition 218 adds Articles XIIIC and XIIID to the California Constitution, and contains a variety of interrelated provisions concerning the ability of local governments, including the City, to impose both existing and future taxes, assessments, fees and charges.

Article XIIIC removes limitations on the initiative power in matters of local taxes, assessments, fees and charges. Consequently, the voters of the City could, by future initiative, seek to repeal, reduce, or prohibit the future imposition or increase of, any local tax, assessment, fee or charge. "Assessment," "fee," and "charge" are not defined in Article XIIIC and it is unclear whether the definitions of such terms contained in Article XIIID (which are generally property-related as described below) are so limited under Article XIIIC.

Article XIIID conditions the imposition of a new or increased "fee" or "charge" on either voter approval or the absence of a majority protest, depending upon the nature of the fee or charge. The terms "fee" and "charge" are defined to mean levies (other than ad valorem taxes, special taxes and assessments) imposed by a local government upon a parcel or upon a person as an incident of the ownership or tenancy of real property, including a user fee or charge for a "property-related service." No assurance can be given that the voters of the City will not, in the future, approve initiatives which seek to repeal, reduce, or prohibit the future imposition or increase of, assessments, fees, or charges, including the Commission's fees and charges, which are the source of Net Revenues pledged to the payment of debt service on the B onds. The Commission believes that Article X IIID does not apply to Airport fees and charges imposed by the Commission.

The interpretation and application of Proposition 218 will ultimately be determined by the courts or through implementing legislation. The Commission is unable to predict the outcome of any such litigation or legislation.

State Proposition 26

In November 2010, the voters of the State approved Proposition 26, known as the "Supermajority Vote to Pass New Taxes and Fees Act." Proposition 26, among other things, amended Article XIIIC to the California Constitution principally to define what constitutes a "tax" under the limitations and requirements of that provision. Article XIIIC imposes limitations on local governments like the City when imposing certain taxes, including a requirement that the local government submit certain taxes to the electorate for its approval. B efore Proposition 26. Article XIIIC did not define the term "tax" and the purpose of Proposition 26 is to broadly define what constitutes a tax under Article XIIIC to include "any levy, charge, or exaction of any kind imposed by a local government." Proposition 26 lists several exceptions to the definition of "tax," which include (a) a charge for a specific benefit or privilege, which does not exceed the reasonable costs of providing the benefit or privilege, (b) a charge for a government service or product, which does not exceed the reasonable costs of providing the service or product, (c) a charge for the reasonable regulatory costs of issuing licenses and permits, performing investigations, inspections, and audits, and the administrative enforcement thereof, (d) a charge for entrance to or use of local government property, or the purchase, rental, or lease of local government property, and (e) a fine, penalty, or other monetary charge imposed as a result of a violation of law. If any of the Airport's fees and charges were determined to be "taxes" that are "imposed" under Article XIIIC, the Airport may no longer be able to impose or adjust those fees and charges without voter approval.

Employee Relations

The Commission budgeted 1,835 full-time equivalent positions for Fiscal Year 2019-20, as compared to 1,827 in Fiscal Year 2018-19. The Charter governs the Airport's employment policies. The Charter authorizes the San Francisco Civil Service Commission to establish rules and procedures to implement those policies.

There are presently 17 labor unions representing Airport employees. The Charter requires collective bargaining. Employee organizations representing City workers are able to negotiate wages, hours, benefits and other conditions of employment through collective bargaining. All Airport employees now bargain collectively. Most Airport employee unions entered into new agreements with the City that will expire June 30, 2022. Disagreements between the employees and the City in collective bargaining are resolved by an arbitrator whose decision is final. There have been no strikes by City employees (including Airport employees) since at least 1976, when an amendment to the City's Charter was approved which prohibits strikes and similar work actions by City employees.

For discussion of employee benefit plans, see "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City-Employee Benefit Plans."

Hazardous Material Management

Environmental Staff

The Commission employs environmental staff responsible for management of hazardous materials and compliance with environmental regulations.

Per-and Polyfluoroalkyl Substances

Per-and Polyfluoroalkyl Substances ("PFAS") are a group of more than 3,000 synthetic chemicals that have been in use since the 1940s. PFAS are found in many products such as dental floss, food packaging materials, non-stick products, water repellant textiles, and fire-fighting foams. The FAA requires airport operators to use Aqueous Film Forming Foam ("AFFF") containing PFAS in their aircraft rescue and firefighting vehicles and fire suppression operating systems.

The EPA has determined that, due to the widespread use and persistence in the environment of PFAS, most people in the United States have been exposed to PFAS. The EPA also found evidence that continued exposure above specific levels to certain PFAS may lead to adverse health effects. Currently, the key PFAS classes of concern are perfluoroalkyl sulfonic acids, such as perfluorooctanesulfonate ("PFOS") and perfluorooctanoic acid ("PFOA"). The EPA released a statement in November 2016 summarizing available peer-reviewed studies on laboratory animals and epidemiological evidence in human populations as indicating that exposure to PFOA and PFOS over certain levels may result in adverse health effects including cancer, reproductive and developmental effects, liver effects, immune

effects and other effects. In February 2019, the EPA issued a PFAS Action Plan. The PFAS Action Plan outlines EPA's strategy to better understand the health risks associated with PFAS and to develop tools for characterizing PFAS in the environment, cleanup approaches, and enforcement mechanisms.

On March 20, 2019, the State of California Water Resources Control Board (the "SWRCB") issued Water Code Section 13267 Order WQ-2019-0005-DWQ for the Determination of the Presence of PFAS to all airports in California, including the Airport. The Order identifies the Airport as a facility that accepted, stored, or used materials that may contain PFAS. The Airport uses AFFF containing PFAS, as required by the FAA. The SWRCB Order requires the Airport to test soil and groundwater for 23 PFAS analytes, including PFOA and PFOS. The Airport plans to complete its initial testing plan and submit a completion report by September 30, 2019.

At this time, the Airport is not aware of the extent of any PFAS contamination in soil or groundwater at the Airport. Additionally, the SWRCB has not established cleanup standards for PFAS or otherwise indicated what actions will be required if PFAS is found in soil and groundwater at the Airport. Further, the extent to which PFAS poses a risk to human health and the environment is not yet well understood. If PFAS contamination is found, it is possible that the costs of remediation and third-party liability could be extensive.

Remediation and Preventative Measures

The Commission and certain Airport tenants have discovered and remediated or are engaged in the process of remediating and managing certain contamination on Airport property pursuant to current regulatory standards and requirements of the California Regional Water Quality Control Board, San Francisco Bay Region (the "Regional Board"). The contamination has primarily consisted of leaked fuel constituents that most likely resulted from fueling practices of the 1940s through the early 1960s, accidental spills of fuel hydrocarbons, or releases from leaky pipes or underground tanks. The Commission has instituted regulations establishing fueling practices and facilities requirements that are intended to prevent hazardous materials from being discharged into the environment. Remediation activities at the Airport in the majority of cases have consisted of removal and offsite disposal of contaminated soil and extraction and treatment of contaminated groundwater and the use of in situ remediation methods approved by the regulatory agencies with jurisdiction. Substantial hazardous material management work in connection with projects under the Airport's Master Plan has been completed and continues to be undertaken in connection with remaining Master Plan projects and other Airport Capital Improvement Plan projects.

Pursuant to requirements of the Regional Board, remediation activities have been and continue to be undertaken in specific locations at the Airport by tenants responsible for the contamination in those locations, and the Airport has cleaned up contamination, and expects to continue to clean up contamination, that it encounters during construction on Airport property. As a result of litigation initiated by the Commission in 1997 over contamination on Airport property, the Commission reached settlement agreements with a number of current and former tenants that require such tenants to pay a set percentage of future environmental clean-up costs incurred by the Airport to address any residual contamination caused by such tenants' activities. Since costs incurred by the Airport are not known until the Airport embarks on a construction project or undertakes operation and maintenance activities that encounter such residual contamination, the agreement with the settling tenants provides for compensation of relevant incurred expenses as the Airport incurs such costs. While the total clean-up costs that the Airport will incur are not presently known, the settlement agreements provide that the tenants' obligation terminates when clean-up costs exceed either \$75 million or \$98 million, depending on the tenant and the specific agreement. Some tenants' obligations also terminate after October 2048 regardless of the amount of incurred cost. In the event a settling tenant successfully disputes an invoice, is no longer in business or is otherwise unable to pay its percentage share, the Commission may become responsible for the remediation costs attributable to that tenant.

The Airport has a robust hazardous waste and spill management program to further its compliance with federal, state and local regulations. Under this program, spill remediation activities are managed and reported, and spills are cleaned, to standards that satisfy all regulatory requirements.

Airport Climate Change Goals and Initiatives

Since 2008, the City's Ordinance No. 81-08, "Climate Change Goals and Action Plan," mandates certain GHG emission targets for each City department, as codified in Environment Code Section 902(a). There are multiple GHG-emission reduction/offset/mitigation measures in place or actively being implemented at the Airport through its

Capital Improvement Plan, including energy and fuel efficiency measures, as outlined in the Commission's annual Departmental Climate Action Plan. In Fiscal Year 2015–16, the Airport reduced certain GHG emissions from Airport-controlled operations to 32% below the 1990 emission level, ahead of the 2017 mandate of 25% below the 1990 emission level. However, in Fiscal Year 2016–17, emissions rose to 11% below the 1990 emission level due to an accidental and one-time refrigerant leak that was repaired and is being actively monitored. The one-time event demonstrates the vulnerability of Airport infrastructure and the need for active emissions reduction strategies and capital projects to modernize aging assets, reduce energy use, improve efficiency, and switch to renewable energy sources. Despite this, the Airport remains on track to meet the City's goal of reducing emissions by 40% below 1990 emission levels by 2025, having achieved a 39% reduction from 1990 levels in Fiscal Year 2017–18. The Commission set concurrent goals of carbon neutrality by 2021 and reducing GHG emissions to 50% below 1990 emission levels by 2021. These goals exceed the State's requirement of reducing GHG emissions to 40% below 1990 emission levels by 2030. The remaining City goal, which matches a Statewide goal under Executive Order S-3-05, is 80% below the 1990 emission level by 2050.

The Airport's Carbon Neutral Strategy was drafted and included in the Commission's 2018 Climate Action Plan, and its Zero Net Energy Strategy is being defined through both an Energy Benchmarking Study to be completed in 2019 and a Distributed Energy Resource Study to be completed in 2020. These documents combined will provide a roadmap for reaching these goals by their target date. It will also address Citywide goals adopted as part of the September 2018 Global Climate Action Summit, including reducing waste generation by 15% and landfill disposal by 50% by 2030, and switching all electricity to renewable sources by 2030.

As tenants have an active role to play in the Airport achieving its emissions reduction targets, the Commission also introduced the "SFO Green B usiness Program," an eco-concierge service reducing on-Airport energy and water use and waste generation and associated costs, and is exploring sustainable aviation fuel options. The Airport also reviews all commercial tenant design and construction projects for compliance with State and Airport sustainability and strategic requirements via its Zero Energy and Resilient Outcomes (ZERO) Committee. One such climate and greenhouse gas related requirement under consideration in the near-term is the requirement for all-electric buildings and appliances (hot water heating, commercial kitchen, space heating) – termed "building and space decarbonization."

In 2018, the Commission and a group of airlines and fuel producers signed a Memorandum of Understanding to work cooperatively on expanding the use of sustainable aviation fuels at the Airport. In addition, the Commission has engaged a consultant to study the capacity of regional infrastructure to support greater production or transported volume of sustainable aviation fuel for airlines operating at the Airport.

CAPITAL PROJECTS AND PLANNING

The Capital Improvement Plan Process

The Airport's Capital Improvement Plan ("CIP") process is led by the Capital Project Review Committee (the "CPRC") and the Capital Improvement Plan Working Group (the "CIP Working Group"). The CPRC is comprised of senior management, and the CIP Working Group is comprised of management staff. The CIP Working Group evaluates and ranks capital projects according to a set of objective criteria that reflect the Airport's strategic goals, which currently include nurturing a competitive and robust air service market, delivering exceptional business performance, revolutionizing the passenger experience, and being the industry leader in safety and security. The CPRC reviews the CIP Working Group's ranked list of projects for funding in a CIP. In reviewing the CIP, the CPRC considers available funding and the projected financial impact of capital projects. The CPRC sends its recommendations to the Director who approves the final draft, which is then sent to the Commission for approval. Generally, capital projects require the approval of the Commission and the Board of Supervisors, certain actions of which are subject to approval by the Mayor. In most cases, an airline review is also required (see "SAN FRANCISCO INTERNATIONAL AIRPORT—Airline Agreements"). The Airport's CIP is updated on an as—needed basis.

The Capital Improvement Plan

Overview

The CIP consists of a total of 66 project categories totaling \$7.6 billion, of which \$4.0 billion has been funded to date. The CIP has two components: (1) The Ascent Program – Phase 1 and (2) The Infrastructure Projects Plan. The Ascent Program – Phase 1 totals \$7.3 billion and consists of projects that were included in the Fiscal Year 2016–

17 capital plan, as well as a related program reserve. The Infrastructure Projects Plan includes projects that address other capital needs and totals \$350 million. The Ascent Program – Phase 1 and the Infrastructure Projects Plan are described in greater detail below. The current CIP was approved by the Commission on March 5, 2019.

The CIP is designed to address several key objectives. One of the Commission's highest CIP priority objectives is addressing passenger traffic growth and meeting demand-driven terminal gate needs. The Airport presently experiences gate constraints during peak periods as a result of significant passenger traffic growth it has experienced in the last decade. B etween Fiscal Y ear 2008-09 and Fiscal Y ear 2017-18, enplaned passengers grew 58%. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Passenger Traffic." Other key CIP objectives include improving groundside access for passengers, enhancing safety and security, maintaining current assets in a state of good repair, promoting sustainability, providing the information technology infrastructure necessary to meet passenger and tenant operational needs, improving the customer experience, and maintaining the Airport's competitive position compared to other international gateways with respect to capacity and cost.

Anticipated Costs and Financing Sources

The CIP includes an estimated \$3.6 billion in project spending over the five-year period of Fiscal Year 2019–20 through Fiscal Year 2023–24, of which \$3.4 billion is expected to be funded through a combination of proceeds of the previously issued B onds, the Series 2019E B onds, the Series 2019F B onds, the Series 2019G B onds and additional B onds expected to be issued in the future (see "CERTAIN RISK FACTORS—Risks Related to the Commission's Capital Projects"). In addition, \$185 million of the CIP is expected to be reimbursed with FAA Airport Improvement Program ("AIP") funds and other grants, \$60 million is expected to be funded by the SFO Fuel B onds described under "SECURITY FOR THE SERIES 2019E H B ONDS—Other Indebtedness—SFO Fuel B onds", and \$25 million is expected to be funded with Airport operating funds. The CIP does not currently include spending beyond Fiscal Year 2023–24, and assumes full use of the Ascent Program Reserve (see "—The Ascent Program—Phase I Overview" below). The timing and amounts of additional B onds may change depending on the timing of capital expenditures and market conditions. The Commission bases its bond issuance needs on capital project cash flows, which are updated regularly.

Capital Projects

The estimated capital project costs associated with the CIP are summarized in the table below. While the CIP total is unchanged since its approval on March 5, 2019, project costs for certain projects within the plan, as well as timing of development costs for some projects, have changed. The table below summarizes the CIP, and reflects information on costs, funding and implementation timing as of March 5, 2019, the date of Commission approval.

Capital Improvement Plan (\$ in millions)

Prior Funding ⁽¹⁾	Series 2019EFG Bond Proceeds	Future Funding through FY 2023-24	Total
\$3,990	\$943	\$1,898	\$6,831
_	-	440	440
\$3,990	\$943	\$2,338	\$7,271
12	53	285	350
\$4,002	\$996	\$2,622	\$7,620
	\$3,990 - \$3,990 12	Prior B ond Proceeds \$3,990 \$943	Prior Funding(1) 2019EFG B ond Proceeds Funding through FY 2023-24 \$3,990 \$943 \$1,898 - - 440 \$3,990 \$943 \$2,338 12 53 285

⁽¹⁾ Includes funding from proceeds of previously issued Bonds and other sources that have been secured.

⁽²⁾ The Ascent Program Reserve has been and is expected to be used only after considering other cost mitigation efforts. Subsequent to Commission approval on March 5, 2019, an additional \$61 million from the Ascent Program Reserve was allocated to projects. As of June 30, 2019, a total of \$360 million of the \$739 million Ascent Program Reserve originally established has been allocated to projects, leaving a balance of \$379 million. An additional \$19 million expected to be applied to projects in the near future.

⁽³⁾ Totals may not add due to rounding.

The Ascent Program - Phase I Overview

The Ascent Program – Phase I consists of projects that were included in the Fiscal Year 2016–17 capital plan, representing \$7.3 billion of the \$7.6 billion CIP. Highlights of the Ascent Program – Phase I's capital projects are provided in the following sections. Project budgets in these sections reflect total project budgets, which may include prior year funding.

The program originally included a \$739 million Ascent Program Reserve in September 2017. The Ascent Program Reserve has been used to address unanticipated needs of projects within the Ascent Program, as they have arisen. Only projects in the Ascent Program are eligible to receive program reserves. The Commission only utilizes the Ascent Program Reserve after consideration of other cost mitigation methods. A net of \$360 million of the Ascent Program Reserve has been allocated to projects since the Commission approved the CIP on September 5, 2017, resulting in a remaining Ascent Program Reserve balance of \$379 million as of June 30, 2019. As of June 30, 2019, approximately \$19 million of Ascent Program Reserve was undergoing additional considerations, and may be transferred to individual projects, which would result in an Ascent Program Reserve balance of \$360 million. The Report of the Airport Consultant attached hereto as APPENDIX A assumes that the entire Ascent Program Reserve is used. If a portion of the Ascent Program Reserve is not utilized, the Commission may elect to apply to a potential subsequent phase of the Ascent Program.

While there is no specific plan for a subsequent phase to the Ascent Program, in 2016 the Commission completed a recommended Airport Development Plan ("Recommended ADP"), which is currently undergoing environmental review. See "-Airport Development Plan." The Recommended ADP, as modified during environmental review, will result in the identification of a range of potential additional capital projects, one or more of which may be designated as the "Ascent Program - Phase II" (or similar title) and added to future versions of the Commission's CIP, if and when the Commission deems that they are warranted to address traffic growth and other factors. The Recommended ADP is not included in the CIP, nor is it reflected in the financial forecasts included in the Report of the Airport Consultant.

A brief description of the largest projects in the Ascent Program – Phase I follows below, organized by five Airport cost centers: Terminals, Groundside, Airport Support, Utilities, and Airfield. Note that some projects span multiple cost centers; in such cases project totals reflect only the total for that cost center. Project budgets are as of July 2, 2019. Some individual project budgets remain subject to change, but any changes within the Ascent Program are expected to be managed within the overall \$7.3 billion Ascent Program – Phase I budget.

Major Ascent Program - Phase I Capital Projects - Terminals

The largest terminal project spending in the CIP is for the renovation of Terminal 1 (\$2.4 billion) and the renovation and reconfiguration of the eastern and western sides of Terminal 3 (\$1.2 billion). The planned Terminal 1 renovations include the construction of a new 25-gate B oarding Area B (19 replacement gates and 6 new gates), seismic and building systems improvements, construction of a new baggage handling system, renovation of the central and southern portions of the departures hall, construction of a consolidated security checkpoint, and construction of a post-security passenger connector and sterile connector from Terminal 1 to the International Terminal with enhanced passenger amenities. The reconfiguration and renovation of the western side of Terminal 3 is intended to increase gate flexibility, improve seismic stability, upgrade building and baggage handling systems, improve passenger flow, add a sterile connector to the International Terminal, and enhance passenger amenities. The renovation of the eastern side of Terminal 3 was completed in 2015.

Other major terminal spending in the CIP includes the International Terminal – Phase 1 project to upgrade and improve the operational efficiency within the departures level of the terminal and an International Terminal Phase II project, which has not entered the project pre-design phase (\$313 million for Phase 1 & 2); the Courtyard 3 Connector project which will construct a post-security passenger connector between Terminal 2 and Terminal 3 in conjunction with a multi-story office block for Commission and tenant use (\$254 million); the Boarding Area A Gate Enhancement project to meet increased gate demands (\$116 million); the Terminal 2 Air Traffic Control Tower demolition and office tower, which will construct new office, concession, airline club space, and public amenities (\$92 million); and improvements to the International Terminal baggage handling system (\$88 million).

Major Ascent Program - Phase I Capital Projects - Groundside

The On-Airport Hotel (\$240 million) is one of the largest groundside projects in the CIP. The On-Airport Hotel is anticipated to open in late September 2019. See "SECURITY FOR THE SERIES 2019E-H BONDS - Other Indebtedness - Special Facility Bonds" and "-Airport Hotel Special Facility Revenue Bonds" for discussion of the financing of the On-Airport Hotel.

Three major projects comprise the majority of the balance of the groundside improvement projects: the AirTrain Extension Project, which extends the AirTrain system to the new long-term parking garages and constructs a new station at the On-Airport Hotel (\$238 million); the recently-completed second long-term parking garage (\$154 million); and the groundside portion of the South McDonnell Road Realignment project (\$42 million).

Major Ascent Program - Phase I Capital Projects - Airport Support

Major airport support projects include: the Airport Security Infrastructure Program (\$169 million); renovation of the Superbay Hangar (\$107 million); airport support technology improvements (\$91 million); and the completed first phase of the Consolidated Administrative Campus (\$87 million).

Major Ascent Program Phase I Capital Projects - Utilities

Major utilities-related CIP projects include: "net zero" energy use-related improvements to the terminals and other Airport facilities and systems (\$176 million); waste water system improvements (\$132 million); and energy and efficiency improvements (\$18 million).

Major Ascent Program Phase I Capital Projects - Airfield

Major airfield-related CIP projects include taxiway improvement projects (\$86 million); runway improvements (\$61 million); and the airfield portion of the South McDonnell Road Realignment (\$28 million).

Ascent Program - Phase I - Major Capital Project Deferrals

A number of projects that were included in the capital plan adopted in Fiscal Y ear 2016–17 were deferred and are not included in the CIP. Notable deferrals include the consolidated rental car facility project and the related rental car center conversion to public parking (\$540 million). Airport staff and senior management determined the consolidated rental car facility project not to be a critical capital need at this time. Other notable deferrals include the Building 944 conversion to flight kitchen (\$26 million), and the renovation of Cargo Buildings 606 and 730 (\$25 million), which also were determined not to be critical capital needs at this time. Deferral of these projects helped offset increases in other Ascent Program project budgets, resulting from decisions to add scope elements to meet demand and/or to address the impact of construction cost escalation on project budgets, without increasing the total cost of the Ascent Program – Phase I. There have been other, less substantial, deferrals since the adoption of the CIP and the scope of some projects has been reduced, most notably the Shoreline Protection Program discussed under "– Other Anticipated Capital Needs–Shoreline Protection Program"

Infrastructure Projects Plan - Major Capital Projects

The Infrastructure Projects Plan consists of 18 new infrastructure projects added to the CIP after Fiscal Year 2016–17. The Infrastructure Projects Plan has a total approved project cost of \$350 million. This reflects an increase of approximately \$228 million compared to the capital plan adopted in September 2017, primarily attributable to new projects added in the CIP. These projects are critical for meeting current safety and operational needs of the Airport. Major projects include the installation of new on-Airport jet fuel storage tanks (\$60 million), which will be funded by the SFO Fuel Bonds issued in early 2019 (see "SECURITY FOR THE SERIES 2019E-H BONDS – Other Indebtedness – SFO Fuel Bonds"); power distribution system improvements to support the terminals (\$45 million); nutrient treatment capacity at the Mel Leong W astewater Treatment Plant (\$30 million); Federal Aviation Administration (FAA) Part 139 required airfield improvements (\$28 million); and aircraft parking power and preconditioned air improvements at Plot 40/41 (\$25 million), which is partially grant funded.

Implementation of Capital Projects

The Commission uses a variety of strategies to mitigate risk associated with the implementation of the projects in its CIP. The Commission has a Project Labor Agreement to minimize labor-related disruptions to project implementation. The Project Labor Agreement applies to most major Airport capital projects including Terminal 1 Center, Boarding Area B, and the post-security passenger connectors; and the construction of the Terminal 2 Office Tower); International Terminal and Boarding Area F checked baggage system modernization program; improvements to the International Terminal baggage handling system; the industrial waste treatment plant; the On-Airport Hotel; the Airport Security Infrastructure Program; the new long-term parking garage; the first phase of the Airport-wide amenities program (the REACH project); the AirTrain Extension; Terminal 3 West renovations; Boarding Area A gate enhancements; Plot 2 and South McDonnell Road realignment, the International Terminal Phase I and II projects, and the Courtyard 3 Connector. The Airport works closely with stakeholders, including airlines, on development and implementation of the CIP.

The Commission has also developed a number of approaches to anticipate and mitigate construction cost escalation. At each design phase, if engineers' estimates exceed budget, staff may utilize value engineering to identify opportunities to reduce costs. Airport project cost models include a variety of contingencies, including construction-escalation of 5% per year, to the mid-point of construction, applied to unawarded base bid scope (i.e., the estimated cost of trade bid packages, not including contingencies, that have not yet been awarded to a subcontractor). Other contingencies include a 0% –15% design contingency applied to base bid unawarded scope in a declining amount through final design, and a 5% bid contingency applied to unawarded base bid scope. The Commission also adds a budgeted Airport contingency equal to 7.5% of the total budget of the prime construction contract. Further, the Airport identifies 10% of discretionary scope in each project, as well as future projects that may be deferred or removed, if and as necessary, based on cost and demand considerations. Lastly, the Airport may use portions of the Ascent Program Reserve after other cost management techniques have been considered.

Nevertheless, project development could be delayed, or the cost of completing projects included in the CIP could be higher than expected, due to various factors. See "CERTAIN RISK FACTORS- Risks Related to the Commission's Capital Projects."

As of May 31, 2019, 51% of the work, representing the cost of labor completed and materials purchased against project budgets, for the construction portion of the Ascent Program, which makes up \$7.1 billion of the \$7.3 billion Ascent Program, had been performed. In addition, the Airport had cost assurance on 73% of the construction portion of the Ascent Program, representing a portion of the current project budgets that have reached a guaranteed maximum price, are in contract, or have otherwise been committed.

Airport Development Plan

The Airport completed the Recommended ADP in September 2016. The Recommended ADP includes a series of recommended projects that would accommodate potential growth up to approximately 71.1 million annual passengers, serve as a roadmap to guide long-term Airport development, and support the Airport's overarching strategic objectives. The Recommended ADP identifies potential projects that would accommodate forecast demand for landside facilities, including additional gates and airport and airline support facilities. The Recommended ADP includes a new terminal boarding area with international and domestic swing gates, replacement of the Central Garage, and expansion of the ITC.

The Recommended ADP will first undergo required environmental review under the California Environmental Quality Act ("CEQA"), and then individual projects will undergo further review as described below. The Airport initiated the City's process to implement CEQA review when it submitted an application to the San Francisco Planning Department in July 2017. Development of the draft environmental impact report ("EIR") is ongoing. The San Francisco Planning Department published a notice of preparation of the EIR in May 2019 and hosted two public scoping meetings. This notice initiated the public CEQA review process and solicited guidance from public agencies as to the scope and content of the EIR, which takes a minimum of 24 months, and may take much longer depending on the outcome of several required opportunities for public comment and appeal. Once CEQA review of the Recommended ADP is completed, the Commission then could consider approval of the individual Recommended ADP projects. Individual projects would still be subject to Board of Supervisors review, federal environmental review under the National Environmental Policy Act ("NEPA"), or both, where applicable, and further Commission review before they proceed. Projects included in the Recommended ADP will not necessarily be

undertaken. Projects would be added to future capital improvement plans when and as they are warranted by passenger growth. If projects are substantially refined in the future, further review under CEQA and/or NEPA may be required before the projects could proceed.

Other Anticipated Capital Needs

The Airport is studying other investments in addition to the CIP and the ADP, including investments related to the FEMA flood insurance rate map update and investments in utilities infrastructure and in shoreline protection.

FEMA Flood Insurance Rate Map Update

As part of the National Flood Insurance Program ("NFIP"), a federal program that enables businesses and individuals in participating communities to purchase flood insurance backed by the federal government, the Federal Emergency Management Agency ("FEMA") is revising Flood Insurance Rate Maps ("FIRMs") for San Francisco Bay Area communities. FIRMs identify special flood hazard areas ("SFHAs") that are subject to inundation during a flood having a 1% chance of occurrence in a given year. The City participates in NFIP, and on November 12, 2015, FEMA issued a Preliminary FIRM for the City (the "Preliminary FIRM"). The Preliminary FIRM identifies the majority of the Airport as an SFHA, with zone designations generally of either AE (areas subject to inundation by the 1% annual chance flood event) or, in limited areas, VE (areas subject to inundation by the 1% annual chance flood event with additional hazards associated with storm-induced waves). The Airport anticipates that FEMA will issue a Letter of Final Determination regarding the final San Francisco FIRM in fall 2019, with subsequent adoption by the City of the final FIRM and conforming amendments to the City's Floodplain Management Ordinance required within six months thereafter. If these AE and VE designations remain the same in the final FIRM, new buildings or substantial improvements to existing buildings will be required to be elevated above the floodplain, with additional building requirements in the AE zone. In light of the SFHAs identified on the Preliminary FIRM, the Airport has decided to begin applying the flood protection building standards that will be required under the zone designations in the final FIRM. The Airport is reviewing building permits for compliance with these standards. Compliance with the final FIRM will result in increases of the cost of some of the projects in the Airport's Capital Improvement Plan and other capital projects.

MUIS

The Commission is currently conducting a Master Utilities Infrastructure Study (MUIS), which, once completed, may recommend a number of capital project to either maintain and renovate existing utilities infrastructure or construct new utilities infrastructure to meet future anticipated Airport needs. The Commission expects the MUIS to be completed in the fall of 2020.

Shoreline Protection Program

The Airport is adjacent to the San Francisco B ay, which, in turn, opens onto the Pacific Ocean. The Airport has constructed various types of seawalls since the 1980s. Currently, more than six of the eight miles of shoreline are protected by engineered earthen berms, concrete seawalls, and vinyl sheet piles. However, there are gaps of variable lengths along the shoreline that may allow water to enter the airfield and the Airport, as well as occasional wave overtopping of some flood protection structures. That water is captured in the storm drain system and is pumped back out into the B ay. A report released by the San Francisco B ay Conservation Development Commission in 2011 suggested that 72% of the Airport would be at risk from a 16-inch sea level rise.

Close to half of the Airport's existing perimeter shoreline meets FEMA 100-year flood standards. However, a study conducted by the Airport identified deficiencies in the Airport's shoreline protection system. Most of these deficiencies occur in the more vulnerable portions of the system, such as near the Airport's Wastewater Treatment Plant, and along the reach owned by the federal government and operating as a U.S. Coast Guard facility.

Utilizing the 2012 National Research Council Sea-Level Rise projections, the Commission proposed a \$58 million shoreline protection project ("Shoreline Protection Program") in its Capital Improvement Plan. In December 2015, the Board of Supervisors made a determination required under the San Francisco Administrative Code that the Shoreline Protection Program is fiscally feasible and responsible.

In June 2014, the Airport's Director of Engineering and Construction Services issued a report to the Airport Commission, which estimated that to comply with FEMA requirements and address sea level rise in the longer term, necessary shoreline protection improvements would take 10 to 15 years at a cost of about \$200–\$300 million. B ased on information available at that time, the report predicted that these improvements would protect the Airport until approximately 2060.

In March 2018, the State of California Ocean Protection Council issued an update to its Sea Level Rise Guidance document containing improved science and policy with a better understanding of risks quantified as probabilities. The Airport accordingly updated the proposed Shoreline Protection Program to respond to these more stringent criteria, bringing the updated Shoreline Protection Program to a new estimated cost of \$587 million. According to projections in the 2018 guidance document, the updated Shoreline Protection Program would protect the Airport assets and runways, with a 99.5% level of confidence, to approximately 2085. The Airport is preparing an updated feasibility study to present to the Board of Supervisors before initiating environmental review of the updated Shoreline Protection Program, as required by the CEQA and NEPA. If approved, the updated Shoreline Protection Program is estimated to begin in Fiscal Year 2024–25 and be implemented in phases over several years. The Airport is also in discussions with the U.S. Army Corps of Engineers about completing a Planning Assistance to States study to establish design and engineering criteria for the updated Shoreline Protection Program.

The original Shoreline Protection Program is included, in a significantly reduced size and scope, in the CIP projects assumed to be undertaken in the Report of the Airport Consultant and included in the CIP described in "-The Capital Improvement Plan." However, the updated Shoreline Protection Program is not currently in the Airport's approved CIP, nor was it included in the CIP projects assumed to be undertaken in the Report of the Airport Consultant.

Planning to Respond to Climate Change and Sea Level Rise

Adapting to sea level rise is a key component of the City's policies, and plans, including its building requirements, and the City is actively participating in a number of regional efforts to plan for and mitigate sea level rise.

In April 2017, the Working Group of the California Ocean Protection Council Science Advisory Team (in collaboration with several state agencies, including the California Natural Resource Agency, the Governor's Office of Planning and Research, and the California Energy Commission) published a report, that was formally adopted in March 2018, entitled "Rising Seas in California: An Update on Sea Level Rise Science" (the "Sea Level Rise Report") to provide a new synthesis of the state of science regarding sea level rise. The Sea Level Rise Report provides the basis for State guidance to state and local agencies for incorporating sea level rise into design, planning, permitting, construction, investment and other decisions. Among many findings, the Sea Level Rise Report indicates that the effects of sea level rise are already being felt in coastal California with more extensive coastal flooding during storms, exacerbated tidal flooding, and increased coastal erosion. In addition, the report notes that the rate of ice sheet loss from Greenland and Antarctic ice sheets poses a particular risk of sea level rise for the California coastline.

The City and its enterprise departments, including the Airport, have been preparing for future sea level rise for many years and have issued a number of public reports. For example, in March 2016, the City released a report entitled "Sea Level Rise Action Plan," identifying geographic zones at risk of sea level rise and providing a framework for adaptation strategies to confront these risks. That study shows an upper range of end-of-century projections for permanent sea level rise, including the effects of temporary flooding due to a 100-year storm, of up to 108 inches above the 2015 average high tide. To implement this Plan, the Mayor's Sea Level Rise Coordinating Committee, cochaired by the Planning Department and the Port of San Francisco, joined a number of other public agencies, including the Airport, to create "Adapt SF," which is now drafting a Citywide Sea Level Rise Vulnerability Assessment, a Citywide Sea Level Rise Risk Assessment, a Sea Level Rise Adaptation Plan, public maps and tools to communicate sea level rise impacts and implementation of near-term adaptation projects.

The City's 2016 Sea Level Rise Action Plan states that one key missing piece of information is an understanding of the effects of climate change on precipitation. Certain City departments, including the Airport, are engaging a consultant team to model future storm events, quantify how climate change impacts extreme storms, and prepare an action plan for addressing climate change for use by the City departments. In addition to its coastal location and vulnerability to sea level rise and storm surges, the Airport also has obligations to provide sufficient drainage in its West of B ayshore property, which may be inundated by the surrounding hillsides in an extreme storm event. Heavy

precipitation events and related flooding could also disrupt major roads that provide access to the Airport. The consultants' study is expected to be completed in 2019.

In September 2017, the City filed a lawsuit against the five largest investor-owned oil companies seeking to have the companies pay into an equitable abatement fund to help fund investment in sea level rise adaptation infrastructure. In July 2018, the United States District Court, Northern District of California denied the plaintiffs' motion for remand to state court, and then dismissed the lawsuit. The City appealed these decisions to the United States Court of Appeals for the Ninth Circuit, which is pending. While the City believes that its claims are meritorious, the City can give no assurance regarding whether it will be successful and obtain the requested relief from the courts, or contributions to the abatement fund from the defendant oil companies.

Federal Grants

The Airport receives federal funding from the FAA, the TSA, and other federal agencies. The Commission expects that \$184 million of the costs of the CIP will be reimbursed with federal grant funding, including an estimated \$120 million in AIP grants including an estimated \$82 million in FAA discretionary grants, and \$64 million in TSA funding. If grants are not received as expected, the Commission may find other funding sources, including additional Bonds, to finance projects in the CIP or may defer projects to which grants would have been applied. Federal grants receivable of \$15.2 million and \$5.1 million as of June 30, 2018 and 2017, respectively, were based on actual costs incurred, subject to federal reimbursement limits.

The AIP provides federal capital grants to support airport infrastructure through entitlement grants, which are determined by formulas based on passenger, cargo and general aviation activity levels, and discretionary grants, which are allocated on the basis of specific set-asides and the national priority ranking system. The FAA administers the Airport's AIP grants. When determining the distribution of discretionary grants, the FAA may consider, as a militating factor, whether the Airport uses its revenues for purposes other than capital or operating costs, when those revenues exceed the amount used by the Airport for such costs in the base year ending June 30, 1995 as adjusted for inflation. The Airport's Annual Service Payment to the City's General Fund for indirect services, management and facilities provided by the City to the Airport is considered to be a non-capital, non-operating cost for this purpose. With the exception of Fiscal Year 2001-02, the Annual Service Payment has exceeded the base year payment when adjusted for inflation since Fiscal Year 1996-97. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Certain Federal and State Laws and Regulations-Federal Law Prohibiting Revenue Diversion" and "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City," and in the past, the Commission has received a lower amount of FAA discretionary grants than it requested as a result of the amount of the Annual Service Payments. For example, the Commission received \$12.4 million in FAA discretionary grants in the federal fiscal year ended September 30, 2016, which is \$15.4 million less than the \$27.8 million the Commission requested. The Commission anticipates receiving \$1.5 million in FAA discretionary grants in the federal fiscal year ending September 30, 2019, which is \$1.5 million less than the \$3.0 million the Commission is requesting. Discussions with the FAA regarding Federal Fiscal Year 2019 grants are ongoing and actual grants received may differ from the Commission's expectations. The FAA may reduce discretionary grants in the future as a result of the Annual Service Payments. The FAA may also reduce or deny discretionary grant awards as a result of changes in FAA policies or practices. Furthermore, AIP funding may be reduced in the future as a result of legislation or the failure of the U.S. Congress to pass an annual appropriation bill including such funding. Reduction in grants awarded to the Commission could result in the delay or cancellation of projects or the incurrence of additional debt by the Commission. Also see "CERTAIN RISK FACTORS-Risks Related to the Commission's Capital Projects."

Project costs are subject to audit by the funding agencies to ensure that the costs are allowable under the grant agreements. If any project costs are disallowed, amounts recorded as grants receivable will be reduced or refunded to the respective funding agencies.

Grants received by the Airport are audited from time to time. The Airport has been audited by OIG and others with respect to grants and PFCs. In the past, audits have resulted in repayments of grants and reductions of other grant reimbursement requests. In addition, audits have resulted in changes to the Airport's internal controls and procedures. While some of these audits remain pending and the Airport may be required to repay grants it has received or take other remedial measures, the Commission does not believe any required repayments will have any material adverse impact on the business operations or financial condition of the Airport.

AIRPORT'S FINANCIAL AND RELATED INFORMATION

General

The Airport generates its operating revenues primarily from airline terminal rentals and landing fees, concession revenues, parking management revenues, trip fees and Passenger Facility Charges. The Airport operates as a "residual" airport, which means that the Signatory Airlines are obligated under the Lease and Use Agreements to pay all of the Airport's operating expenses and debt service costs less any non-airline revenues of the Airport. The Commission establishes terminal rental rates and landing fees in advance for each upcoming Fiscal Year based on the Airport's estimated revenues and expenses. Actual receipts and expenses in any Fiscal Year will be either more or less than estimated revenues and expenses. Due to the residual nature of the Lease and Use Agreements, to the extent there is an over-collection in any year (that is, receipts from the airlines exceed the Airport's net costs), the Airport is obligated to reduce future terminal rentals and landing fees by a corresponding amount. Similarly, if there is an under-collection in any year, the Airlines are obligated under the Lease and Use Agreements to pay such deficiency from future rates and charges. For a description of the Lease and Use Agreements and potential changes upon their expiration, see "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements" and APPENDIX E. Also see "SECURITY FOR THE SERIES 2019E-H BONDS-Pledge of Net Revenues; Source of Payment-Certain Adjustments to 'Revenues' and 'Operation and Maintenance Expenses'-Unearned Aviation Revenues/Aviation Revenues Due."

The primary driver of the Airport's operating revenues is the consistently strong level of demand for origin and destination travel to and from the Airport. An estimated 81% of passengers at the Airport are originating their journeys, with the remaining 19% connecting between flights. See APPENDIX A— "AIRLINE TRAFFIC AND ECONOMIC ANALYSIS-Airline Service and Routes." This demand is driven, in turn, by local, national and global economic conditions, with the strength of the local San Francisco B ay Area economy as the most salient factor. See "CERTAIN RISK FACTORS-Local Economy" and APPENDIX A— "AIRLINE TRAFFIC AND ECONOMIC ANALYSIS-Key Factors Affecting Future Airline Traffic." Further, the connecting traffic at the Airport is primarily driven by United Airlines' hubbing activities, with the Airport being an important and profitable hub in that air carrier's network. Airport management pursues opportunities to grow revenues from non-airline sources, such as concessions, parking and ground transportation. The availability of these revenues is also largely driven by demand for passenger service at the Airport.

Airport expenditures are comprised of operating and capital expenses. Operating expenses are growing as passenger levels increase. The Lease and Use Agreements allow for minimal amounts of capital expenditures to be funded from operating revenues and requires most capital expenditures to be financed. As a result, debt service is a substantial and growing component of the Airport's expenditures each year.

Summary of Financial Statements

Summary of Statements of Net Position. A summary of the Commission's Statements of Net Position as reported in the Commission's annual financial statements for Fiscal Y ears 2013–14 through 2017–18 is shown in the table on the next page. See Appendix B-"Financial Statements with Schedule of Passenger Facility Charge Revenues and Expenditures June 30, 2018 and 2017 (With Independent Auditors' Report Thereon)."

[Remainder of Page Intentionally Left Blank]

SUMMARY OF AIRPORT'S STATEMENTS OF NET POSITION (\$ in thousands) (Fiscal Years)

2014 15

2012 14

	2013-14	2014–15			
	(Restated) ⁽⁶⁾	(Restated) ⁽⁵⁾⁽⁶⁾	2015–16	2016–1 <i>7</i> ⁽⁷⁾	201 <i>7</i> –18 ⁽⁸⁾
Assets:					
Unrestricted current assets(1)(2)(3)	\$ 425,951	\$ 450,598	\$ 467,577	\$ 440,930	\$ 567,930
Restricted current assets	278,346	245,719	282,371	437,934	632,233
Restricted non-current assets	579,933	643,686	640,970	<i>7</i> 26,310	1,460,521
Capital assets, net	3,869,718	3,936,426_	4,045,636	4,282,629	4,930,029
Total assets	5,153,948	5,276,429	5,436,554	5,887,803	7,590,713
Deferred outflows of resources:					
Unamortized loss on refunding of debt	92,147	78,388	68,100	76,789	75,343
Deferred outflows on derivative instruments	63,971	65,408	83,614	54,870	29,245
Deferred outflows related to OPEB	_	_	_	-	13,387
Deferred outflows on pensions		37,517	43,982	145,743	91,596
Total deferred outflows of resources	155,938	181,313	195,696	277,402	209,571
Liabilities:					
Current liabilities ⁽³⁾	268,723	285,929	309,888	284,221	272,022
Current liabilities payable from restricted assets	410,087	154,611	494,128	356,535	298,855
Noncurrent liabilities ⁽⁴⁾	4,285,257	4,608,523	4,248,252	4,895,146	6,584,291
Net OPEB liability	_	_	124,352	138,168	244,096
Net pension liability	-	111,932	144,271	359,599	308,459
Derivative instruments	79,062	79,321	96,132	65,965	37,558
Total liabilities	5,043,129	5,240,316	5,417,023	6,099,634	7,745,281
Deferred inflows of resources:					
Deferred inflows related to OPEB:	_	_	_	_	394
Deferred inflows related to pensions		100,290	48,154	15,402	22,230
Total deferred inflows of resources		100,290	48,154	15,402	22,624
Net position:					
Net investment in capital assets	(149,894)	(103,109)	(117,377)	(284,761)	(564,762)
Restricted for debt service	25,390	37,427	35,462	109,554	186,655
Restricted for capital projects	200,219	165,224	212,931	296,188	419,486
Unrestricted	191,042	17,594	36,057	(70,812)	(9,000)
Total net position	\$ 266,757	\$ 117,136	\$ 167,073	\$ 50,169	\$ 32,379

⁽¹⁾ For a description of the cash and investments of the Airport, see "-Investment of Airport Funds."

Source: Commission.

⁽²⁾ Net of allowance for doubtful accounts (in thousands): 2018: \$1,609: 2017: \$1,807: 2016: \$1,214: 2015: \$633: 2014: \$547.

⁽³⁾ Includes uneamed aviation revenue (aviation revenue due) (formerly referred to as deferred aviation revenue) of (in thousands): 2018: (\$37,761); 2017: \$54,853; 2016: \$67,556; 2015: \$55,704; 2014: \$55,633. Uneamed aviation revenues consist of the amount, in each Fiscal Year, that terminal rental rates and landing fees under the airline Lease and Use Agreements exceed the Airport's net operating expenses. The Airport is obligated to reduce future rates and charges by a corresponding amount. If there is an under-collection in any year ("aviation revenue due"), the airlines are obligated under the Lease and Use Agreements to pay such deficiency from future rates and charges. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements."

⁽⁴⁾ Amounts include compensated absences, accrued worker's compensation, claims payable and long-term debt outstanding.

⁽⁵⁾ The Airport has adopted GASB Statement No. 68, Accounting and Financial Reporting for Pensions. The July 1, 2014 beginning financial position has been restated for the retroactive application of this new accounting guidance. The cumulative effect of applying this statement is reported as a restatement of beginning net position as of July 1, 2014. The restatement resulted in the net position being reduced from \$266.8 million as of July 1, 2014, to \$61.0 million to record beginning net pension liability and beginning deferred outflows of resources.

⁽⁶⁾ The Airport adopted GASB Statement No. 72, Fair Value Measurement and Application, which changes how fair value is measured and provides guidance for applying fair value. As a result, the Airport restated its beginning deferred outflows on derivative instruments and derivative instruments liabilities for Fiscal Year 2013–14 and Fiscal Year 2014–15 in the amount of \$1.2 million and \$1.4 million, respectively.

⁽⁷⁾ Net position decreased by \$116.9 million, primarily due to a significant increase in net pension liability related to the impact of changes in benefits, the updated citywide supplemental costs of living adjustments (COLA) assumptions and amortization of deferred outflows. See APPENDIX B - "FINANCIAL STATEMENTS WITH SCHEDULE OF PASSENGER FACILITY CHARGE REVENUES AND EXPENDITURES JUNE 30, 2018 AND 2017 (WITH INDEPENDENT AUDITORS' REPORT THEREON)."

⁽⁸⁾ The Airport adopted GASB 75 in Fiscal Y ear 2017–18. The Airport restated its beginning net position as of July 1, 2017, from \$50.2 million to negative \$32.8 million to record beginning net OPEB liability, deferred outflow/inflow of resources and OPEB expense. See "AIRPORT'S FINANCIAL AND RELATED INFORMATION-Payments to the City-Employee Benefit Plans-Post-Employment Health Care Benefits" and APPENDIX B-"FINANCIAL STATEMENTS WITH SCHEDULE OF PASSENGER FACILITY CHARGE REVENUES AND EXPENDITURES JUNE 30, 2018 AND 2017 (WITH INDEPENDENT AUDITORS' REPORT THEREON)."

Total unrestricted cash (including amounts in the Contingency Account) totaled \$410.4 million for Fiscal Year 2015–16. \$375.6 million in Fiscal Year 2016–17. and \$458.2 million in Fiscal Year 2017–18.

Summary of Statement of Revenues, Expenses, and Changes in Net Position. A summary of the Commission's Statements of Revenues, Expenses, and Changes in Net Position as reported in the Commission's annual financial statements for Fiscal Y ears 2013–14 through 2017–18 is shown in the table below. See APPENDIX B-"FINANCIAL STATEMENTS WITH SCHEDULE OF PASSENGER FACILITY CHARGE REVENUES AND EXPENDITURES JUNE 30, 2018 AND 2017 (WITH INDEPENDENT AUDITORS' REPORT THEREON)."

SUMMARY OF AIRPORT'S STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION (\$ in thousands) (Fiscal Years)

	2013-14	2014–15	2015-16	2016–17	2017–18
Aviation Revenues	\$441,259	\$464,610	\$495,439	\$ 545,310	\$670,282
Concession Revenues ⁽¹⁾	253,290	269,868	283,615	300,245	310,325
Net Sales and Services	76,142	80,886	87,937	81,245	83,195
Total Operating Revenues	770,691	815,364	866,991	926,800	1,063,802
Total Operating Expenses ⁽²⁾	(625,660)	(609,029)	(640,473)	(808,860)	(770,186)
Operating Income	145,031	206,335	226,518	117,940	293,616
Nonoperating Revenue (Expense)(3)	(203,598)	(141,826)	(144,463)	(201,020)	(196,910)
Income (Loss) Before Capital Contribution and Transfers	(58,567)	64,509	82,055	(83,080)	96,706
Capital Contributions ⁽⁴⁾	91,024	32,119	10,424	11,212	15,051
Transfer to the City	(37,994)	(40,480)	(42,542)	(45,036)	(46,549)
Changes in Net Position ⁽⁵⁾	\$ (5,537)	\$ 56,148	\$ 49,937	\$(116,904)	\$65,208

⁽¹⁾ Also includes parking and transportation revenues.

Source: Commission.

Operating Revenues

The Commission receives operating revenues primarily from aviation-related activities, ground transportation, and concessions. Each of these categories of revenues is described below. The Commission also receives revenues from net sales and services, which consist of revenues derived from utility services, telecommunication access fees, badge and permit fees, rental car facility fees and cost-based reimbursement of various services.

Principal Revenue Sources

Set forth in the table below is a description of the Airport's principal revenue sources. No single tenant accounted for more than 22.5% of total operating revenue in Fiscal Y ear 2017–18. For the purpose of this table, the term "revenues" includes all amounts paid to the Airport by a company, including Concession Revenues, rent, utilities, etc.

⁽²⁾ Includes depreciation expense in the amounts of \$222.8 million for Fiscal Year 2013-14, \$216.1 million for Fiscal Year 2014-15, \$228.4 million for Fiscal Year 2015-16. \$265.8 million for Fiscal Year 2016-17 and \$265.2 million for Fiscal Year 2017-18.

⁽³⁾ Includes interest expense in the amount of \$202.0 million for Fiscal Year 2013–14, \$210.6 million for Fiscal Year 2014–15, \$208.6 million for Fiscal Year 2015–16, \$210.4 million for Fiscal Year 2016–17 and \$211.5 million for Fiscal Year 2017–18.

⁽⁴⁾ Represents federal and state grant funds.

⁽⁵⁾ Net position decreased by \$116.9 million in Fiscal Year 2016-17, primarily due to a significant increase in net pension liability related to the impact of changes in benefits, the updated citywide supplemental costs of living adjustments (COLA) assumptions and amortization of deferred outflows inflows.

TOP TEN SOURCES OF REVENUE

		FY 2015-16 ⁽¹⁾	FY 2016-17 ⁽¹⁾	FY 2017-18 ⁽¹⁾
C	Catalana	Revenues	Revenues	Revenues
Company/Source	Category	(\$ in thousands)	(\$ in thousands)	(\$ in thousands)
United Airlines	Airline	\$206,153	\$218,231	\$239,071
On Airport Parking ⁽²⁾	Public Parking	103,282	106,791	100,903
DFS Group, L.P.	Duty Free and General Merchandise	30,116	30,385	37,118
American Airlines ⁽³⁾	Airline	33,622	36,515	35,750
Enterprise Rent-a-Car Rental, LLC (formerly EAN, LLC) ⁽⁴⁾	Rental Car	35,196	35,644	35,573
Delta Air Lines	Airline	28,355	28,902	30,863
Virgin America ⁽⁵⁾	Airline	29,512	31,409	26,306
The Hertz Corporation	Rental Car	30,243	27,065	24,932
Avis Budget Car Rental, LLC	Rental Car	27,500	26,783	24,459
Raiser CA LLC/Uber 032512	Ground Transportation	N/A	20,057	22,057
Southwest Airlines(6)	Airline	18,289	N/A	N/A
Subtotal Ten Highest		\$542,267	\$561,781	\$577,032
Other Operating Revenue		324,724	365,019	486,770
Total Operating Revenue		\$866,991	\$926,800	\$1,063,802
Other Revenue ⁽⁷⁾		16,554	8,967	13,087
PFC Collections		99,131	103,955	111,971
Total Airport Revenue		\$982,676	\$1,039,722	\$1,188,860

⁽¹⁾ Revenue is audited and includes operating and non-operating income and credit adjustments.

Source: Commission.

Aviation Revenues

Under the Lease and Use Agreements, the Airport's operating budget and non-airline revenue sources are projected for each new Fiscal Year. Then, using a residual cost methodology, airline landing fees and terminal rental rates are set such that estimated total Airport revenues each Fiscal Year are equal to estimated total Airport operating costs, which include debt service and certain capital items as well as general operation and maintenance expenses. Increases in non-airline revenue sources generally result in decreases in airline landing fees and terminal rental rates. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements-Lease and Use Agreements."

Terminal Rental Rates and Landing Fees

For Fiscal Year 2019-20, annual terminal rental rates range from \$331.66 per square foot for Category I space (ticket counters and hold rooms) to \$33.17 per square foot for Category V space (unenclosed or covered areas at ramp level), with an average rate per square foot of \$191.50. For Fiscal Year 2018-19, annual terminal rental rates range from \$310.94 per square foot for Category I space to \$31.09 per square foot for Category V space, with an average rate per square foot of \$179.21.

The landing fee rate for Fiscal Year 2019-20 is \$5.80 per thousand pounds of landed weight compared to \$5.54 per thousand pounds of landed weight for Fiscal Year 2018-19. Operators without a lease or operating permit pay a landing fee charge of \$7.25 per thousand pounds of landed weight. For Fiscal Year 2019-20, the minimum landing fee for fixed wing aircraft is \$393 compared to \$372 for Fiscal Year 2018-19.

⁽²⁾ New South Parking-California manages the Airport's public short-term garages and long-term parking facility and collects parking revenues on behalf of the Airport.

⁽³⁾ On December 9, 2013, American Airlines and US Airways merged, although they continued to operate under separate FAA operating certificates until April 8, 2015, when American Airlines received a single operating certificate from the FAA. US Airways continued to report operations separately until October 2015.

⁽⁴⁾ Effective September 1, 2017, the EAN, LLC lease was reassigned to Enterprise Rent-a-Car Rental LLC.

Alaska Air Group, Inc. and Virgin America, Inc. merged effective December 2016. The merged airline received a single operating certificate from the FAA in January 2018. The merged airline moved to a single reservations system on April 25, 2018, and has adopted Alaska's name and logo and retired the Virgin America brand. The figures in this table include only Virgin America's revenues, not Alaska's, in the respective years. (6) Southwest Airlines was not one of the top ten sources of revenues in Fiscal Years 2016–17 or 2017–18.

⁽⁷⁾ Includes interest and other non-operating revenue.

Because of the variety of methodologies used by different airports to calculate airline landing fee and terminal rental rates, such fees and rates are not directly comparable between airports. However, terminal rental rates and landing fees represent a small proportion of overall costs to the airlines per enplaned passenger at the Airport, and are not a primary consideration in the establishment and maintenance of routes and schedules. Instead of rates, airline payments per passenger (for landing fees and terminal rental rates) is an index commonly used to compare the costs to the airlines for their facilities at different airports. Airline payments per enplaned passenger at the Airport are set forth in the table below. Overall, costs to the airlines are expected to rise in the near term, primarily due to the issuance of additional B onds to fund the construction of capital projects. See "CAPITAL PROJECTS AND PLANNING—The Capital Improvement Plan." Also see Part 5 and Exhibit Lin APPENDIX A.

AIRLINE PAYMENTS PER ENPLANED PASSENGER

Fiscal Year	Amount
2017–18	\$16.89
2016–17	17.18
2015-16	16.29
2014-15	16.23
2013–14	15.85

Source: Commission.

Terminal rental rates and landing fees are adjusted annually on July 1. The Lease and Use Agreements do not require the airlines, either individually or as a group, to maintain any minimum level of landed weight at the Airport. A summary of historical and current landing fees for scheduled aircraft with a lease or operating permit and average terminal rental rates for Fiscal Years 2015–16 through 2019–20 is set forth below.

HISTORICAL AND CURRENT LANDING FEES AND TERMINAL RENTALS (Fiscal Years)

	2015-16	2016–17	2017-18	2018-19	2019-20
Landing Fees (per 1,000 pounds)	\$4.87	\$4.99	\$5.24	\$5.54	\$5.80
Minimum Landing Fee (fixed wing)	245	285	350	372	393
Minimum Landing Fee (rotary)	123	143	1 <i>7</i> 5	186	196
Average Terminal Rental Rate (per square foot)	157.18	161.16	169.03	179.21	191.50

Source: Commission.

Airline Incentive and Stimulus Programs

The Airport has successfully attracted several new international flights and air carriers with airline incentive and stimulus programs. The Commission implemented a new Air Carrier Incentive Program, which provides a 100% waiver of landing fees for 24 months for any new non-stop international route to or from the Airport (including Mexico and Canada) that is not currently served by an existing carrier. From May 2013 through June 30, 2019, the Incentive Program has resulted in 19 new destinations offered by a combination of United Airlines and nine new carriers.

Ground Transportation Revenues

The Commission derives revenues from parking, rental cars and transportation network companies and other ground transportation. TNCs and other ground transportation revenues include fees collected from TNCs, taxis, limousines, shared-ride vans, hotel and off-airport parking shuttles, and other commercial modes of transportation. The Commission's total ground transportation revenue for Fiscal Year 2017–18 totals \$201.0 million, down from \$202.6 million in Fiscal Year 2016–17. The relative share of these sources of revenue is shifting. For further discussion, see "FINANCIAL ANALYSIS-Revenues-Nonairline Revenues" in Appendix A.

Rental Cars

Currently, five on-Airport rental car companies representing nine brands operate at the consolidated rental car facility, which is located approximately one mile north of the Terminal Complex. The agreements with these

companies were scheduled to expire on December 31, 2018. On October 16, 2018, after a competitive bidding process, the Commission awarded new five-year agreements with two-year extension options, to be effective upon approval by the Board of Supervisors, with an aggregate minimum annual guarantee ("MAG") of \$47.2 million, with four companies that operate nine rental car brands. Under the new agreements, all brands would remain the same, except that Fox would be replaced by Sixt Rent a Car. Fox filed a writ of mandate challenging the Commission's October 2018 action awarding the new agreements, and in April 2019 the trial court ruled in the Commission's favor. In May 2019, San Francisco Office of Labor Standards Enforcement issued guidance stating that the prevailing wage provisions of San Francisco Administrative Code section 21C.3 apply at the Airport's consolidated rental car facility. This determination conflicts with the new leases awarded following the Commission's 2018 competitive bidding process, which require compliance with San Francisco's Minimum Compensation Ordinance. The Commission has asked the four companies to consider whether they would accept the prevailing wage requirement without any change to any other lease term, including the MAG or rent payment terms. If any of the four companies do not agree to that change, Airport staff intend to request that the Commission rescind its October 2018 action awarding the new agreements and authorize a new competitive process for new agreements to replace the current agreements. Airport staff have asked the four companies to respond by August 28, 2019.

The current agreements are continuing on a month-to-month holdover basis until new agreements are approved by the Board of Supervisors and fully executed. The on-Airport rental car companies generated aggregate concession revenue and building space rent to the Airport of \$65.9 million in Fiscal Year 2017–18 and \$68.0 million in Fiscal Year 2016–17.

Turo, Inc. (f.k.a. RelayRides, Inc.) ("Turo") is a web-based rental car company that operates at the Airport. Turo matches individual car owners with prospective renters at the Airport, and it advertises and markets itself as competing with traditional rental car companies at the Airport. For several years Turo held a valid off-Airport rental car permit, but on August 10, 2017, it voluntarily relinquished its permit. Yet it continues to operate at the Airport. In January 2018, the City Attorney in the name of the People of the State of California filed an action against Turo, Inc. for unfair competition. Turo filed a cross-complaint challenging the Airport's authority to charge the AirTrain fee described below under "-SFO Transportation and Facility Fees" and the 10% Gross Receipts Charge paid by rental car companies, and impose permit requirements on Turo. Turo's cross-complaint claims that Turo is merely a technology platform and a car-sharing program – not a rental car company – and that it does not operate at the Airport. The case is in the discovery phase with trial currently scheduled for spring 2020.

SFO Transportation Fees

The rental car companies collect a per rental contract fee (\$18.00 in 2018–19 and \$16.00 in Fiscal Y ear 2019–20) that is paid to the Commission for reimbursement of certain costs of operating and providing the AirTrain facilities between the Terminal Complex and the rental car facility located one-mile north of the Terminal Complex. The total collected in Fiscal Y ear 2017–18 was \$32.3 million.

Parking

New South Parking-California, GP provides management and operation services of the Airport's public and employee parking facilities under a contract that commenced July 1, 2018 and has a term of five years. The guaranteed maximum price that the Airport will pay (the "GMP") under this contract is \$23.5 million for the first year of the five-year contract. GMPs are capped at a 3% increase from the previous year's GMP for subsequent years.

In Fiscal Year 2017–18, parking revenues declined by 5.5%, or \$5.9 million, to \$100.9 million, as compared to \$106.8 million in Fiscal Year 2016–17. Parking transactions increased by 0.8% in Fiscal Year 2017–18 as compared to the prior fiscal year while the average price per exit decreased by 5.9% from \$32.66 in Fiscal Year 2016–17 to \$30.74 in Fiscal Year 2017–18. In June 2016, most public parking rates were increased to moderate parking demand.

On February 5, 2019, the second long-term garage was opened to the public adding approximately 3,600 additional parking stalls. With the ability to accommodate additional demand for parking, the daily long-term parking rate was reduced from \$25.00 to \$18.00 per day beginning May 1, 2019. The Commission continues to periodically review and adjust parking rates.

The new and existing long-term parking garages are expected to be connected to the terminals by an extension of the AirTrain beginning in the fall of 2020; until then the terminals will be accessible from the long-term parking

garages by the existing shuttle service. The Commission believes that the AirTrain connection will make the long-term parking garages more attractive to potential customers.

The Airport's parking facilities compete with off-airport facilities located near the Airport that are operated by private companies. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Current Airport Facilities-Public Parking and Rental Car Facilities."

TNCs and Other Ground Transportation

Revenue from commercial ground transportation totaled \$50.7 million in Fiscal Year 2017–18, an increase of \$7.1 million or 16.4%, mainly due to commercial vehicle trip fee rate increases of up to 20.0%, and the increased demand for transportation network company operations at the Airport, which include Uber Technologies Inc., Lyft, Inc., and Tickengo, Inc. d/b/a/ Wingz. In Fiscal Year 2017–18, TNCs recorded nearly 9.1 million Airport pick-ups/drop-offs resulting in \$34.5 million in trip fee revenue as compared to 7.0 million Airport pick-ups/drop-offs and \$26.6 million in trip fee revenue in Fiscal Year 2016–17. With the exception of scheduled buses, which experienced an increase in trips of 4.7% in Fiscal Year 2017-18, all other commercial modes of transportation experienced decreases in trips in Fiscal Year 2017-18, including door-to-door pre-arranged vans (23.5%), shared-ride vans (19.4%), limousines (14.9%), taxis (13.9%), hotel shuttles (4.5%), off-airport parking vans (0.9%).

The current fee structure for TNCs and other commercial vehicles was implemented effective July 1, 2019. A per trip fee of \$4.50 was initiated for TNC trips and other low occupancy commercial vehicle modes (including limousines and taxi pickups; no charge for taxi drop-offs). The per trip fee for high occupancy vehicle modes (defined as 7 or more passengers) is \$3.60.

Concessions Revenues

Retail and Food and Beverage Program

As of May 2019, the domestic terminals have 37 retail locations and 47 restaurants and the international terminal has 19 retail locations (including 7 duty free locations) and 20 restaurants.

Since the reopening of Terminal 2 in 2011, the Airport has been recognized with numerous concessions and travel industry awards and public accolades, and the concession offerings in Terminal 2 have become the model for future development of food and beverage and retail locations at the Airport.

Renovations of Terminal 1 are under way. Since 2017, nine stores and restaurants have been redeveloped, and nine additional stores and restaurants are expected to open by the end of calendar year 2019. A newly constructed portion of Terminal 1 referred to as B oarding Area B is expected to open in phases during calendar years 2019 through 2022. Overall concessions square footage is expected to grow from approximately 11,000 to 55,000 in concert with an increase in the number of gates (see "Capital Projects and Planning—The Capital Improvement Plan—Major Ascent Program—Phase I Capital Projects—Terminals") by the time all of Terminal 1 B oarding Area B opens in late 2022.

Fully renovated portions of Terminal 3 opened in 2014 and 2015. Renovations of the remainder of Terminal 3 are in the planning phase. These renovations of the portion of Terminal 3 referred to as "Terminal 3 West" will expand concessions footage from approximately 21,310 square feet to approximately 35,747 square feet are expected to commence in 2020 and to be completed in 2023.

A comprehensive renovation of the ITC concessions program is underway. Twenty-one new food and beverage concepts and six new retail stores have opened since 2017.

The majority of the Commission's retail and food and beverage leases are structured for the Commission to receive a percentage of gross revenues or a MAG, whichever is higher. The MAG provides the Airport with a guaranteed amount of revenues paid on the first of each month, which amount is unaffected by customer sales activity. The Airport's concession agreements with tenants generally provide that the MAG is temporarily suspended, and the tenant is required to pay only the percentage rent, if monthly enplanements in the relevant boarding area of the Airport are less than 80% of the enplanements of the same month in the calendar year immediately prior to the year in which the concession is awarded (the "reference month"), and this shortfall continues for three consecutive months. The

MAG is reinstated once monthly enplanements equal or exceed 80% of the enplanements of the reference month for two consecutive months.

In Fiscal Y ear 2017–18, food and beverage domestic terminal sales increased over the prior year by 5.8% and ITC sales increased over the prior year by 15.9%. In Fiscal Y ear 2017–18, food and beverage domestic terminal revenues to the Airport increased by 5.9% over Fiscal Y ear 2016–17 and ITC revenues increased over the prior year by 18.2%. The increase in both sales and revenues is attributable to an increase in enplanements and deplanements at the Airport and for ITC, the renovation of the ITC concessions program, which commenced during Fiscal Y ear 2016–17 with 16 new restaurant openings and renovations to the ITC food court facilities. The difference between sales and revenue growth reflects how the Airport's concessionaire leases are structured. Overall, the domestic terminal passenger food and beverage spend rate declined by 4.4% in Fiscal Y ear 2017–18 over the prior Fiscal Y ear to \$9.23 from \$9.66 and the ITC food and beverage spend rate increased by 17.4% from \$7.23 to \$8.49. The overall passenger food and beverage spend rate at the Airport in Fiscal Y ear 2017–18 was \$9.04, a 0.9% increase from Fiscal Y ear 2016–17.

In Fiscal Y ear 2017–18, retail sales, excluding duty free, decreased 1.7% compared to the prior year, with a per passenger spend rate decrease of 8.4% to \$4.33 from \$4.72. In Fiscal Y ear 2017–18, rent from retail concessions increased 3.5% due to minimum annual guarantee CPI adjustments and increased passenger activity.

Duty Free Program

In April 2018, the Commission entered into a new concession agreement with DFS Group, L.P., which is exclusive for duty free sales and non-exclusive for duty paid sales. The new lease is for 12 stores covering about 46,000 square feet, primarily in the International Terminal, with one location in Terminal 1 anticipated to open sometime in 2021 or 2022. Most ITC locations will open during calendar year 2019. The 14-year base term of the lease will commence January 1, 2020. The term may be automatically extended in some circumstances. Duty free construction will be phased with stores remaining open at all times; rent during this development period is 30% of gross revenues. Once the refurbishment is complete, rent will be the greater of a \$42.0 million MAG (for duty free and duty paid, subject to annual upward adjustment) or rent calculated as a percentage of annual sales.

Advertising Program

Clear Channel Airports has held the advertising concession lease with the Commission since 2001. The Commission entered into a lease with Clear Channel commencing July 1, 2013 and ending December 31, 2022, which requires Clear Channel Airports to pay the Commission a fixed rent amount of \$10.0 million (as adjusted pursuant to the lease) per lease year. The fixed rent for calendar year 2019 is \$11,778,437.

Top Ten Sources of Concession Revenues

In Fiscal Y ear 2017–18, concession revenues, including revenues for parking and other ground transportation, were \$110.3 million, a 3.4% increase compared to the previous Fiscal Y ear's revenues of \$300.2 million.

The following table summarizes concession revenues for Fiscal Y ears 2015–16 through Fiscal Y ear 2017–18 attributable to the Airport's largest concession revenue sources. For the purpose of this table, "Concession Revenue" is defined as fees and rentals collected by the Commission for: (i) the right to provide and operate restaurants, bars, car rental services, newsstands, gift shops, specialty shops, advertising displays, public telephones and other merchandising concessions and consumer services in the Terminal Area; (ii) the right to provide and operate courtesy vehicles, ground transportation services, hotels, service stations and other concessions and services in the groundside area; and (iii) other activities and services in the groundside area of the Terminals such as public automobile parking and traffic fines.

TOP TEN SOURCES OF AIRPORT CONCESSION REVENUES

			FY 2015-16 Concession	FY 2016-17 Concession	FY 2017-18 Concession
Concessionaire/Manager	Concession Revenue Sources	Lease/Agreement Expiration Date	Revenue (\$ in thousands)*	Revenue (\$ in thousands)*	Revenue (\$ in thousands)*
DFS Group, L.P.	Duty Free and General Merchandise	12/31/17 ⁽¹⁾	\$ 29,436	\$ 29,671	\$ 36,418
Enterprise Rent-a-Car Rental, LLC (formerly EAN, LLC) (2)	Rental Car	12/31/18 ^(3,4)	16,820	17,522	16,909
Avis Budget Rental Car, LLC	Rental Car	12/31/18 ^(3,5)	13,028	12,969	11,439
The Hertz Corporation	Rental Car	12/31/18 ^(3,6)	13,987	12,248	11,373
Clear Channel Airports	Advertising	12/31/22 ⁽⁷⁾	10,307	10,802	11,139
Travelex America, Inc.	Currency Exchange	1/31/20 ⁽⁸⁾	5,396	5,610	5,786
Tastes on the Fly San Francisco LLC	Food and Beverage	Various ⁽⁹⁾	2,911	4,107	5,448
DTG Operations Rental Car	Rental Car	12/31/18 ^(3,10)	4,420	4,316	4,382
WDFG North America, LLC (Formerly Host International Inc.)	General Merchandise	Various ⁽¹¹⁾	3,509	3,376	3,045
Gotham Enterprises, LLC	Food and Beverage	Various ⁽¹²⁾	N/A	2,776	2,424
D-Lew Enterprises	Food and Beverage	Various ⁽¹³⁾	2,566	N/A	N/A
Sub Total			\$102,380	\$103,397	\$108,363
Other Revenue ⁽¹⁴⁾			181,235	196,849	201,962
Total Concession Revenue			\$283,615	\$300,246	\$310,325

^{*} See also "-Concessions Revenues."

⁽²⁾ Effective September 1, 2017, the EAN, LLC lease was reassigned to Enterprise Rent-a-Car Rental LLC.

(3) For each rental car company there are two leases: a concession lease and a facility lease. Revenue reflects only the concession lease.

(5) Doing business as Avis Rent-A-Car and Budget Rent-A-Car. The minimum annual guaranteed rent for Fiscal Y ear 2017–18 was \$10.6 million. The minimum annual guaranteed rent was \$5.0 million between July 1, 2018 to December 31, 2018. Starting on January 1, 2019, tenant was on holdower status and only subject to percentage rent.

(6) The minimum annual guaranteed rent for Hertz Corporation in Fiscal Y ear 2017–18 was \$10.7 million. The minimum annual guaranteed rent was \$5.2 million between July 1, 2018 to December 31, 2018. Starting on January 1, 2019, tenant was on holdover status and only subject to percentage rent.

The minimum annual guaranteed rent for Clear Channel in Fiscal Year 2017–18 was \$11.1 million and in Fiscal Year 2018–19 was \$11.5 million.

(8) The minimum annual guaranteed rent for Travelex American Inc. in Fiscal Year 2017–18 was \$5.8 million and in Fiscal Year 2018–19 was \$6.0 million.

(9) Tastes on the Fly operates various locations within the Airport, each with a different expiration date. The total minimum annual guaranteed rent for Fiscal Y ear 2017–18 was \$1.4 million and for Fiscal Y ear 2018–19 was \$2.2 million.

(10) Doing business as Dollar Rent-A-Car and Thrifty Car Rental. The minimum annual guaranteed rent for Fiscal Year 2017–18 was \$3.7 million. The minimum annual guaranteed rent was \$1.8 million between July 1, 2018 to December 31, 2018. Starting on January 1, 2019, tenant was on holdover status and only subject to percentage rent.

(11) WDFG North America, LLC (Formerly Host International Inc.) operates various locations within the Airport, each with a different expiration date. The total minimum annual guaranteed rent for Fiscal Year 2017–18 was \$2.3 million and for Fiscal Year 2018–19 was \$2.3 million. In January 2014, WDFG of North America, LLC purchased the Retail unit of Host International Inc. and continues to operate its locations under the existing lease terms.

(12) Gotham Enterprises, LLC operates various locations within the Airport, each with a different expiration date. The total minimum annual guaranteed rent for Fiscal Year 2017–18 was \$0.2 million and for Fiscal Year 2018–19 was \$0.3 million. Gotham Enterprises, LLC was not one of the top ten sources of concession revenues in Fiscal Year 2015–16.

(13) D-Lew Enterprises operates various locations within the Airport, each under lease agreements with a different expiration date. D-Lew Enterprises, LLC was not one of the top ten sources of concession revenues in Fiscal Year 2016–17 or 2017–18.

(14) Represents the aggregate concession revenue received from approximately 86 additional concessionaires operating 135 concessions, public parking and ground transportation operators at the Airport, including public parking revenues of approximately \$103.3 million in Fiscal Year 2015–16, approximately \$100.9 million in Fiscal Year 2017–18, and TNC trip fee revenues of approximately \$16.9 million in Fiscal Year 2015–16, approximately \$26.6 million in Fiscal Year 2016–17 and approximately \$34.5 million in Fiscal Year 2017–18.

Source: Commission.

⁽¹⁾ The minimum annual guaranteed rent for DFS Group, L.P. in Fiscal Year 2017–18 was \$27.0 million. For Fiscal Year 2018–19, DFS Group is subject to percentage rent until the conclusion of the construction period in October of 2019 at which time a minimum annual guaranteed amount of \$42 million will commence.

⁽⁴⁾ Doing business as Enterprise Rent-A-Car, Alamo Rent-A-Car and National Car Rental. The minimum annual guaranteed rent for Fiscal Year 2017-18 was \$14.6 million. The minimum annual guaranteed rent was \$7.2 million between July 1, 2018 to December 31, 2018. Starting on January 1, 2019, tenant was on holdover status and only subject to percentage rent.

Passenger Facility Charge

Prior to 2001, the Airport financed its capital program primarily through the issuance of revenue bonds and commercial paper secured by a pledge of the Net Revenues of the Airport, federal grants and Airport operating revenues. In 2001, the Airport received authorization from the FAA to commence collection and use of a PFC in the amount of \$4.50 per enplaning passenger to pay for certain eligible capital projects as approved by the FAA. The PFC revenues received by the Airport are subject to audit and final acceptance by the FAA and costs reimbursed with PFC revenues are subject to adjustment upon audit.

PFC Applications

The following is a summary of the Airport's approved PFC applications through March 31, 2019.

SUMMARY OF AIRPORT PFC APPLICATIONS As of March 31, 2019

Application #	Date of Application	Date of FAA Approval	Original Amount (millions)	R evised Amount (millions)	Expiration Date ^(a)	Collected ^(b,g) (millions)	Remaining (millions)
1 ^(c)	March 2001	July 2001	\$113	\$ 0	June 2003	\$ O	\$ O
2	November 2001	March 2002	224	224	November 2005	224	0
3(q)	July 2003	November 2003	539	609	January 2017	609	0
5 ^(e)	October 2010	October 2013	610	742	October 2024	543	199
6 ^(f)	July 2013	June 2015	141	0	March 2026	0	0
7 ^(f)	October 2016	May 2017	320	0	February 2030	0	0
8 ^(f)	June 2018	October 2018	537	537	March 2029	0	537
	TOTAL(h):			\$2,112 ^(h)		\$1,376 ^(h)	\$736 ^(h)

⁽a) The Commission expects to complete collection of its current authorization in Fiscal Year 2024-25.

Source: Commission.

The Commission expects that its current PFC authorization will be fully collected in Fiscal Year 2024–25. The Commission intends to submit further PFC applications and application amendment requests to the FAA that would permit it to continue collecting PFCs at a \$4.50 rate and provide for increased PFC collection and use authority in the future, including requests for authorization to use PFC revenues to pay debt service associated with the Terminal 1 and Terminal 3 redevelopment projects.

The Office of Inspector General (the "OIG") of the U.S. DOT recently reviewed the FAA's administration and oversight of airport operators' compliance with the use of PFC funds. The Airport was included in the OIG's review. In December 2018, OIG reported its findings, that most public agencies comply with PFC program requirements, but FAA could use available tools more effectively to strengthen its oversight. FAA concurred or partially concurred with all of the OIG recommendations except one for FAA to monitor ongoing use of PFC-funded assets.

⁽b) Includes interest earnings on collections.

⁽c) The Airport suspended the project to be funded by PFC revenues under Application #1 in June 2003 and submitted an amendment to delete Application #1 in December 2003. The FAA approved this request in January 2004. The PFC collections under the original Application #1, totaling \$112.7 million, were applied toward Application #2. As such, the \$224.0 million of PFC collections under Application #2 includes \$112.7 million collected under Application #1.

⁽d) The Airport submitted, and later withdrew, PFC Application #4 for an authorization of \$70 million. The \$70 million was then included in the revised authorization amount under Application #3.

⁽e) On November 7, 2014, the FAA approved the Airport's amendment to PFC Application #5 for an additional \$131.3 million with an extended collection period through October 1, 2024.

⁽f) On October 4, 2018, the FAA approved the Airport's PFC Application #8, which combined PFC Application #6, as amended and PFC Application #7 for a new combined total of \$537 million of collection and spending authority, with an estimated expiration date of March 1, 2029. PFC Application #8 resulted in FAA administrative amendments for PFC Applications #6 and #7 to close out and transfer the collections and projects to PFC Application #8.

⁽g) Preliminary. Accrual basis.

⁽h) Totals may not add due to rounding.

Designation of PFC Collections as Revenues

PFC collections are not included in the definition of "Revenues" under the 1991 Master Resolution. The Commission, however, has the ability but not the obligation under the 1991 Master Resolution to designate some portion or all of such collections as "Revenues" for a given Fiscal Year. These amounts so designated thus contribute to the Airport's calculation of debt service coverage for purposes of its rate covenant. The actual amount of PFC collections to be designated as "Revenues" and used to pay debt service is dependent, in part, upon the amounts permitted for such use by PFC regulations and the Airport's PFC applications. To date, the Commission has determined the amount to be designated as Revenues prior to the start of each Fiscal Year. The amount may later be adjusted, depending upon actual PFC collections during the Fiscal Year, Airport net revenues relative to budget, and other factors. PFC collections that are not applied as "Revenues" and used to pay debt service on related B onds are deposited and retained in a separate account and are available to be applied for such purposes in future Fiscal Years. As of March 31, 2019, the Airport reported to the FAA a balance of \$467.6 million in such account, which may be used to pay debt service on related B onds or for other purposes. Set forth in the table below is a summary of Airport PFC collections and amounts applied to pay debt service for the current and the ten most recent Fiscal Years.

PFC COLLECTIONS APPLIED BY THE COMMISSION FOR PAYMENT OF DEBT SERVICE ON OUTSTANDING BONDS

Applicable Fiscal Year	PFC Collections (millions) ⁽¹⁾	PFC Designated as Revenues (millions) ⁽²⁾	Amount Applied to Pay Debt Service (millions) ⁽³⁾
2019–20	N/A ⁽⁴⁾	\$102.9	N/A ⁽⁴⁾
2018-19	N/A ⁽⁴⁾	67.9	\$63.3
2017-18	\$115.1	31.7	4.1
2016–17	105.9	44.9	23.4
2015-16	100.2	58.1	43.1
2014-15	93.2	62.6	47.6
2013-14	88.0	60.2	35.7
2012-13	85.1	51.5	45.0
2011-12	82.3	88.5	73.0
2010-11	77.9	87.2	87.2
2009-10	75.0	61.0	61.0
2008-09	70.3	51.0	51.0

⁽¹⁾ Includes PFC collections and related interest earned for the year. B ased on Audited Financial Statements.

Source: Commission.

The Commission's receipt of PFC revenues is subject to certain risks. A shortfall in PFC revenues or a decision by the Commission not to designate PFCs as Revenues may require the Commission to increase landing fees and terminal rentals to pay its debt service on the B onds.

Collection of PFCs in the Event of Airline Bankruptcy

In order to ensure continuation of the PFC program, including the trust fund status of collected PFCs, Congress amended the PFC enabling legislation effective December 12, 2003, to provide additional specific obligations for an air carrier operating under bankruptcy protection in Chapter 7 or Chapter 11. The statute provides that (i) the air carrier must segregate in a separate account an amount of PFCs equal to its average monthly liability, (ii) PFCs are funds held in trust for each airport regardless of the ability to identify or trace precise funds, (iii) the air carrier may not pledge the PFCs to a third party, (iv) an airport is entitled to recover costs for enforcing an air carrier's compliance with the statute, (v) the air carrier may keep any interest income earned on the segregated PFCs if it is in compliance with the PFC enabling legislation, and (vi) PFCs may not be commingled with other air carrier revenues.

While the PFC enabling legislation provides that PFCs are trust funds both before and after an air carrier files for bankruptcy protection, there can be no assurance that, in the event of a bankruptcy, the air carrier will have collected, retained, segregated or properly accounted for its PFCs, or that the Airport would be able to collect from

⁽²⁾ Amount designated as Revenues to be applied to pay debt service. Accumulated PFCs from prior years can be designated in future years.

⁽³⁾ Amount actually applied to pay debt service. Accumulated PFCs from prior years can be applied to pay debt service in future years.

⁽⁴⁾ Figures not available.

the air carrier the PFCs that the airline collected prior to the bankruptcy filing, or that any such collection would be timely.

Operating Expenses

Fiscal Year 2017–18 operating expenses decreased \$38.7 million (4.8%) to \$770.2 million from \$808.9 million in Fiscal Year 2016–17. This decrease is primarily attributable to a \$51.8 million (14.2%) decrease in personnel expenses primarily due to a significant increase in pension expense in Fiscal Year 2016–17 due to the impact of changes in the updated Supplemental COLA assumptions and amortization of deferred inflows outflows. Depreciation expense also decreased \$0.7 million (0.3%), primarily because certain capital assets were fully depreciated by November 30, 2017. Contractual service expenses increased \$12.2 million (16.5%), primarily due to increase in services of management consulting and transportation. Light, heat and power expenses increased \$0.7 million (3.1%), primarily due to an increase in rates and higher consumption. Repairs and maintenance decreased \$0.9 million (2.4%), primarily due to lower spending on facilities maintenance projects. Materials and supplies expenses increased \$1.4 million (8.8%), primarily due to increases in purchases of supplies for security access and mechanical maintenance. General and administrative expenses decreased \$1.8 million (41.9%), primarily due to the increase in estimated bad debt expense. Environmental remediation costs increased \$0.4 million (10.0%) primarily due to an increase in remediation costs related to capital improvement projects. Services provided by other City departments increased by \$1.8 million (8.2%), primarily due to costs associated with the Human Resources Management B enefits Administration System.

Review and Adjustment to Operating Expenditures

Each quarter, the Airport produces a financial forecast for the operating budget. If this forecast were to project that the operating budget would be in a deficit by the end of the Fiscal Year, Airport management likely would implement cost control measures. These cost control measures have included, but are not limited to, workforce reductions or hiring freezes on positions except those that have a direct impact on safety and security, and cuts in discretionary expenditures, such as professional service contracts.

Payments to the City

Annual Service Payment

Under the Lease and Use Agreements, the Commission makes an "Annual Service Payment" to the City to compensate the City for certain indirect services and facilities that it provides to the Airport and the Commission. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements-Lease and Use Agreements" and "Payments from Commission to City" in APPENDIX E. The Annual Service Payment is equal to the greater of (i) \$5 million or (ii) 15% of "Concession Revenues" (as defined in APPENDIX E-"SUMMARY OF CERTAIN PROVISIONS OF THE LEASE AND USE AGREEMENTS-Payments from Commission to City"), and is paid by the Commission in quarterly installments based on estimates and reconciled at year-end. The Annual Service Payment is made only after the payment of Operation and Maintenance Expenses and debt service on outstanding revenue bonds of the Commission, including the Series 2019E-H B onds, and certain other expenditures. See "SECURITY FOR THE SERIES 2019E-H B ONDS-Flow of Funds." The amount of Annual Service Payment for each of Fiscal Y ears 2013–14 through 2017–18 is set forth below.

The Annual Service Payment has been grandfathered under the FAA's 1999 Policies and Procedures Concerning the Use of Airport Revenue. However, the grandfathered status may not continue indefinitely. The FAA or new federal legislation may change or revoke this status. The 2018 FAA Act included a provision that would require the Comptroller General of the United States to initiate within 180 days of enactment of the Act a study of (1) the legal and financial challenges related to repealing such "grandfathering" for the Airport and other airports the FAA has identified as "grandfathered"; and (2) measures that may be taken to mitigate the impact of repealing the exception. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Certain Federal and State Laws and Regulations-Federal Law Prohibiting Revenue Diversion." Also see "CAPITAL PROJECTS AND PLANNING-Federal Grants" and APPENDIX E-"SUMMARY OF CERTAIN PROVISIONS OF THE LEASE AND USE AGREEMENTS-Event of Default; Termination or Suspension of Lease and Use Agreement Provisions-Commission's Right to Suspend Part of Lease and Use Agreement."

Payments for Direct Services

In addition to the Annual Service Payment, the Lease and Use Agreements permit the Commission to reimburse the City's General Fund for the cost of direct services provided by other City departments to the Airport, such as those provided by the Police Department, the Fire Department, the City Attorney, the City Treasurer, the City Controller, the City Purchasing Agent and other City departments. Set forth in the table below is a summary of the payments made by the Airport to the City for Fiscal Years 2013–14 through 2017–18. The Commission is otherwise prohibited under the Lease and Use Agreements from making any payments to the City, directly or indirectly. See "SAN FRANCISCO INTERNATIONAL AIRPORT-Airline Agreements—Lease and Use Agreements" and APPENDIX E. Also see "SAN FRANCISCO INTERNATIONAL AIRPORT—Certain Federal and State Laws and Regulations—Federal Law Prohibiting Revenue Diversion."

SUMMARY OF PAYMENTS MADE BY THE AIRPORT TO THE CITY (\$ in millions)

	Annual	Reimbursement for Direct Services					
	Service				Utility		
Fiscal Year	Payment	Police	Fire	Other ⁽¹⁾	Costs	Subtotal	Total
2017-18	\$46.5	\$56.1	\$24.2	\$26.4	\$49.7 ⁽²⁾	\$156.3	\$202.8
2016–17	45.0	52.2	22.4	23.7	49.1 ⁽³⁾	147.4	192.4
2015-16	42.5	49.6	20.9	22.4	47.8 ⁽⁴⁾	140.7	183.2
2014–15	40.5	47.4	20.7	21.1	46.6 ⁽⁵⁾	135.8	176.3
2013–14	38.0	45.7	20.6	20.8	44.2 ⁽⁶⁾	131.3	169.3

⁽¹⁾ Represents costs of direct services provided by the City Attorney, City Treasurer, City Controller, City Purchasing Agent and other City departments.

Source: Commission.

Employee Benefit Plans

Retirement System. All of the employees of the Airport are members of the San Francisco City and County Employees' Retirement System (the "Retirement System"), which is charged with administering a defined benefit pension plan (the "Fund") and an individual account deferred compensation plan (the "Deferred Compensation Plan"). These two plans are separate and distinct legal entities, with trust funds independent of each other. The Fund was initially established in the late 1880s and was constituted in its current form by the 1932 City Charter. It continues to exist and operate under the Charter. The Charter provisions governing the Retirement System may be revised only by a Charter amendment, which requires an affirmative public vote at a duly called election. The Retirement System is administered by the Retirement B oard consisting of seven members, three appointed by the Mayor, three elected from among the members of the Retirement System and a member of the B oard of Supervisors appointed by the President of the B oard of Supervisors. There may not be more than one retired person on the Retirement B oard.

The table on the next page shows Fund contributions for Fiscal Years 2013–14 through 2017–18. "Market Value of Assets" reflects the value of assets held in trust for payment of pension benefits if they were liquidated on the valuation date. "Actuarial Value of Assets" refers to the value of assets held in trust adjusted according to the Fund's actuarial methods. The "Percent Funded" column is determined by dividing the actuarial value of assets by the actuarial liability. "Employer and Employee Contributions" reflects the total of mandated employee contributions and employer Actuarial Retirement Contributions received by the Retirement System for Fiscal Years 2013–14 through 2017–18. The Fund's last actuarial valuation was as of July 1, 2018 and was issued in February 2019.

⁽²⁾ Approximately \$22.9 million in utility costs were recovered from Airport tenants.

⁽³⁾ Approximately \$22.3 million in utility costs were recovered from Airport tenants.

⁽⁴⁾ Approximately \$21.7 million in utility costs were recovered from Airport tenants.

⁽⁵⁾ Approximately \$21.7 million in utility costs were recovered from Airport tenants.

Approximately \$20.6 million in utility costs were recovered from Airport tenants.

CITY AND COUNTY OF SAN FRANCISCO EMPLOYEES' RETIREMENT SYSTEM End of Fiscal Years 2013–14 through 2017–18 (\$ in thousands)

					E mployee	
	Market	Actuarial			and	Employer
Fiscal	Value	Value	Actuarial	Percent	E mployer	Contribution
Year	of Assets	of Assets	Liability	Funded	Contribution	Rates [†]
2017-18	\$24,557,966	\$23,866,028	\$27,335,417	87.3%	\$983,763	23.31%
2016–17	22,410,350	22,185,244	25,706,090	86.3	868,653	21.40
2015-16	20,154,503	20,654,703	24,403,882	84.6	849,569	22.80
2014-15	20,428,069	19,653,338	22,970,892	85.6	894,325	26.76
2013-14	19,920,607	18,012,088	21,122,567	85.3	821,902	24.82

[†] Employer contribution rates are shown before required employer/employee cost-sharing first effective for Fiscal Y ear 2012–13. Source: Retirement System Actuarial Valuation reports as of July 1, 2013, July 1, 2014, July 1, 2015, July 1, 2016 and July 1, 2017.

The Airport is required to contribute at the actuarially recommended rate of contribution. The Airport's required contributions for Fiscal Years 2013–14 through 2019–20 are set forth below.

AIRPORT CONTRIBUTIONS TO THE RETIREMENT SYSTEM

Fiscal Year	Contribution Rate	Airport Contribution
2019-20	25.19%	\$40.2 million [†]
2018–19	23.31	37.6 million [†]
2017-18	23.46	38.3 million
2016–17	21.40	34.1 million
2015-16	22.80	33.0 million
2014-15	26.76	37.5 million
2013-14	24.82	33.7 million

B udgeted. Revisions to the Fiscal Y ear 2019-20 budget are pending approval. The Commission expects that the budgeted amount for Fiscal Y ear 2019-20 will increase. See "-Budget Process."

Sources: Retirement System Actuarial Valuation Reports and Commission.

Medical Benefits. Medical and COBRA benefits for eligible active Airport and City employees and eligible dependents, for retired Airport and City employees and eligible dependents, and for surviving spouses and domestic partners of covered City employees (the "City Beneficiaries") are administered by the City's Health Service System (the "Health Service System") pursuant to Charter Sections 12.200 et seq. and A8.420 et seq. Pursuant to such Charter Sections, the Health Service System also administers medical benefits to active and retired employees of the San Francisco Unified School District, San Francisco Community College District and the San Francisco Superior Court (collectively the "System's Other Beneficiaries"). However, the City is not required to fund medical benefits for the System's Other Beneficiaries and therefore this section focuses on the funding by the City of medical benefits for City Beneficiaries. The contributions for health care benefits made by the Airport for Fiscal Years 2013–14 through 2017–18 and budgeted for Fiscal Years 2018–19 and 2019–20 are set forth in the following table:

[Remainder of Page Intentionally Left Blank]

AIRPORT CONTRIBUTIONS TO THE HEALTH SERVICE SYSTEM⁽¹⁾ (\$ in millions)

Fiscal Year	Active Employees	Retirees	Total
2019-20	\$32.3 [†]		\$46.8 [†]
2018–19	29.2 [†]	13.7 [†]	42.9 [†]
2017–18	32.1	11.7	43.8
2016–17	29.5	10.9	40.4
2015–16	26.3	10.3	36.7
2014–15	24.2	9.4	33.6
2013-14	24.0	10.8	34.8

⁽¹⁾ Historical information has been restated to capture an updated comprehensive allocation of Health Service System costs, including contributions made for Fire and Police personnel allocable to the Airport, and to apply an updated methodology identifying direct and allocable costs prorated between active employees and retirees for each Fiscal Year.

The Health Service System is overseen by the City's Health Service Board (the "Health Service Board"). The seven member Health Service Board is composed of one member of the City's Board of Supervisors, appointed by the Board President; an individual who regularly consults in the health care field, appointed by the Mayor; a doctor of medicine, appointed by the Mayor; one member nominated by the City Controller and approved by the Health Service Board; and three members of the Health Service System, active or retired, elected from among their members.

The plans (the "HSS Medical Plans") for providing medical care to the City B eneficiaries and the System's Other B eneficiaries (collectively, the "HSS B eneficiaries") are determined annually by the Health Service B oard and approved by the B oard of Supervisors pursuant to Charter Section A 8.422.

The Health Service System oversees a trust fund (the "Health Service Trust Fund") established pursuant to Charter Sections 12.203 and A 8.428 through which medical benefits for the HSS B eneficiaries are funded. The Health Service System issues annually a publicly available, independently audited financial report that includes financial statements for the Health Service Trust Fund. This report may be obtained by writing to the San Francisco Health Service System, 1145 Market Street, Third Floor, San Francisco, California 94103, or by calling 415–554–1727. Audited annual financial statements for several years are also posted in the Health Service System website: https://www.sfhss.org/reports.

As presently structured under the Charter, the Health Service Trust Fund is not a fund through which assets are accumulated to finance post-employment healthcare benefits (an "OPEB trust fund"). Thus, the Health Service Trust Fund is not currently affected by Governmental Accounting Standards Board ("GASB") Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions ("GASB 45"), or GASB 75, which apply to OPEB trust funds.

<u>Post-Employment Health Care Benefits</u>. The Airport participates in the City's agent multiple employer defined benefit plan (the "Plan"), which operates as a cost-sharing multiple employer defined benefit plan for the Airport. Eligibility of City employees for retiree health care benefits is governed by the Charter, as amended by Proposition B, passed by voters on June 3, 2008, and Proposition C, passed by the voters on November 8, 2011. Employees hired prior to January 2009 and a spouse or dependent are potentially eligible for health benefits following retirement after age 50 and completing five years of City service, subject to other eligibility requirements. Employees hired after January 2009 and a spouse or dependent are potentially eligible for gradually vesting health benefits following retirement after age 50 and completing 20 years of City service (for full benefits), subject to other eligibility requirements.

The benefits provided under the Plan are currently paid through "pay-as-you-go" funding. Active City officers and employees contribute a percentage of compensation that varies depending on their hire date.

In June 2015, GASB issued GASB 75, which revises and establishes new accounting and financial reporting requirements for governments that provide their employees with OPEBs. The City implemented GASB 75 in its audited financial statements for Fiscal Year 2017–18. As a result, GASB 75 is reflected in the Financial Statements attached as APPENDIX B.

[†] Budgeted. Revisions to the Fiscal Year 2019-20 budget are pending approval. See "-Budget Process." Source: Commission.

As of June 30, 2018, the City reported net OPEB liabilities related to the Plan of \$3.7 billion. The Airport's proportionate share of the City's net OPEB liability as of June 30, 2018 was \$244.1 million. For the year ended June 30, 2018, the Airport's proportionate share of the City's OPEB expense was \$23.3 million. See Note 10(a) in APPENDIX B-"FINANCIAL STATEMENTS WITH SCHEDULE OF PASSENGER FACILITY CHARGE REVENUES AND EXPENDITURES JUNE 30, 2018 AND 2017 (WITH INDEPENDENT AUDITORS' REPORT THEREON)."

As of June 30, 2018, the Airport had set aside \$117.3 million in a separate fund (a sub-fund of the Airport's operating fund) for purposes of the OPEB obligations, and such amount is included in Unrestricted Cash and Investments in the Airport's audited financial statements for Fiscal Year 2017–18. The disposition of this fund is under management's discretion and has not been placed in a trust fund.

The Health Service System issues a publicly available financial report that includes financial statements for the health care benefits plan. The report may be obtained by writing to the City and County of San Francisco, Office of the Controller, 1 Dr. Carlton B. Goodlett Place, Room 316, San Francisco, California 94102, or by calling 415–554–7500.

Budget Process

The Airport budget is a part of the overall budget which is reviewed and approved according to the City's laws and policies. Starting in Fiscal Y ear 2012–13, the City's enterprise departments, which include the Airport, began submitting two-year budget proposals for review and approval. The Airport's proposed two-year budget is approved by the Commission before being submitted to the Mayor. The Mayor's Office reviews and may amend the Airport's proposed budget, and then incorporates the proposed budget into the overall City budget that is submitted to the B oard of Supervisors for approval. Under the Charter, the B oard of Supervisors may increase or decrease any proposed expenditure in the Mayor's budget so long as the aggregate changes do not cause the expenditures to exceed the total amount of revenues proposed by the Mayor. The Charter further provides that the Mayor may reduce or reject any expenditure authorized by the B oard of Supervisors except appropriations for bond interest, redemption or other fixed charges, subject to reinstatement of any such expenditure by a two-thirds vote of the B oard of Supervisors. The budget may be amended through a supplemental appropriation request, which is prepared by the Controller, submitted by the Mayor's Office and reviewed and approved by the B oard of Supervisors.

The approved operating budget for the Airport for Fiscal Year 2018–19 is \$1.16 billion. Budgeted total revenues in the amount of \$1.16 billion include aviation revenues (\$611.9 million), parking and concessions (\$310.6 million), other non-aviation revenues (\$105.3 million) and non-operating revenues (\$132.2 million). Budgeted total expenditures for Fiscal Year 2018–19 is \$1.16 billion, including personnel costs (\$245.8 million), non-personnel services, materials and supplies, equipment, and contribution to surety bond fund (\$176.6 million), small capital outlay (\$4.8 million), debt service (\$494.8 million), utilities (\$48.2 million), services of other departments, including Fire and Police Departments (\$128.2 million), the Annual Service Payment (\$46.6 million), and facilities maintenance (\$15.0 million). This compares to an approved operating budget for Fiscal Year 2017–18 of \$1.05 billion.

The approved operating budget for the Airport for Fiscal Year 2019–20 is \$1.3 billion. Budgeted total revenues in the amount of \$1.3 billion include aviation revenues (\$667.2 million), parking and concessions (\$341.6 million), other non-aviation revenues (\$107.6 million) and non-operating revenues (\$180.9 million). Budgeted total expenditures for Fiscal Year 2019–20 is \$1.3 billion, including personnel costs (\$252.9 million), non-personnel services, materials and supplies, equipment, and contribution to surety bond fund (\$180.8 million), small capital outlay (\$5.1 million), debt service (\$585.2 million), utilities (\$50.7 million), services of other departments, including Fire and Police Departments (\$145.2 million), the Annual Service Payment (\$51.5 million), facilities maintenance (\$15.5 million), and designated for general reserve (\$10.3 million). A supplemental appropriation request modifying the approved operating budget for Fiscal Year 2019–20 was approved on August 1, 2019. The revisions do not significantly change the overall size of the budget, though amounts in some revenue and expenditure categories have changed.

Risk Management and Insurance

Under the 1991 Master Resolution, the Commission is required to procure or provide and maintain insurance, or to self-insure, against such risks as are usually insured by other major airports in amounts adequate for the risk insured against, as determined by the Commission and to file with the Trustee each year a written summary of all insurance coverage then in effect. The Commission is not required to nor does it carry insurance or self-insure against any risks due to land movement or seismic activity.

The Airport carries general liability insurance coverage of \$1 billion subject to a deductible of \$10,000 per single occurrence. The Airport also carries commercial property insurance coverage of \$1 billion subject to a deductible of \$500,000 per single occurrence. This policy includes flood coverage up to a \$10 million sub-limit. The Airport also carries active assailant coverage of \$10 million subject to a deductible of \$25,000 per single occurrence for property damage, business interruption and extra expenses for a malicious physical attack with a weapon at any of the facilities owned by the Commission affecting three or more persons present during the attack. The Airport is self-insured as part of the City's workers' compensation program. The Airport carries public officials and employment practices liability coverage of \$5 million, subject to a deductible of \$100,000 per occurrence for Public Officials' and Public Entity Liability matters, and \$250,000 per occurrence for Employment Practices Liability matters. The Airport also carries insurance for public employee dishonesty, fine arts, electronic data processing equipment, target range liability for law enforcement personnel, and watercraft liability for Airport fire rescue vessels.

Prior to September 11, 2001, the Airport had liability insurance coverage in the amount of \$50 million per occurrence for war, terrorism and hijacking. Immediately following the events of September 11, 2001, insurers cancelled their coverages for war, terrorism and hijacking for all airports, including the Airport, and for all airlines around the country. A number of insurers now provide this coverage through the Federal Government Terrorism Risk Insurance Act. However, the scope of the coverage is limited and the premiums are high. Due to these factors, the Commission, in consultation with the City's Director of Risk Management, has elected not to secure such coverage but to purchase a stand-alone War Perils liability coverage policy. Effective July 1, 2016, the Airport through its Aviation Liability program carries \$250 million in War Perils liability coverage, subject to a deductible of \$10,000.

Investment of Airport Funds

Under the Charter and the 1991 Master Resolution, the Revenue Fund and the accounts therein, including the Contingency Account, are held by the Treasurer. The 1991 Master Resolution further provides that moneys in all funds and accounts (including Revenues) established under the 1991 Master Resolution which are held by the Treasurer shall be invested in Permitted Investments in accordance with the policies and procedures of the Treasurer in effect from time to time. For definitions of "Revenues" and "Permitted Investments" under the 1991 Master Resolution, see Appendix D-"Summary of Certain Provisions of the 1991 Master Resolution-Certain Definitions." The Proposed Amendments would modify the definition of Permitted Investments. See "Proposed Amendments to 1991 Master Resolution." and in Appendix H-"Summary of Proposed Amendments to 1991 Master Resolution."

Under the Treasurer's current investment procedures, amounts in the Airport's Revenue Fund, Contingency Account, PFC Account and Construction Fund are invested in the City's larger pooled investment fund (the "City Pool"). Payments due from the Revenue Fund and the Construction Fund are made from the City Pool. Among other purposes, the City Pool serves in effect as a disbursement account for expenditures from the City's various segregated and pooled funds.

The Treasurer's investment policy is updated periodically. The objectives of the Treasurer's current investment policy, in order of priority, are preservation of capital, maintenance of liquidity and yield. The Treasurer calculated the current weighted average maturity of these investments as of May 31, 2019 to be 466 days.

Set forth in the table below are the approximate book values of amounts in the City Pool allocable to the Construction Fund, the Operating Fund, the Contingency Account, PFC Funds and the Special Revenue Fund. These amounts include certain minimum balances maintained in the City Pool for liquidity purposes. Also set forth below are the types of investments in the City Pool, and the percentage of total book value of the City Pool as of such date. As of May 31, 2019, the book value of the City Pool was approximately \$12.1 billion. A number of the Airport's reserves are restricted to particular uses. Bondholders should not assume that funds other than the Contingency Account, the applicable reserve fund held under the 1991 Master Resolution, and amounts on deposit at any given time in the Revenue Fund will be available for the repayment of the Bonds.

INVESTMENT DISTRIBUTION OF CITY POOLED INVESTMENT FUND

(as Percentage of Book Value)

(as of May 31, 2019)						
U.S. Treasuries	8.33%					
Federal Agencies	51.13					
Money Market Funds	5.12					
State and Local Obligations	0.91					
Supranationals	5.43					
Public Time Deposits	0.29					
Negotiable Certificates of Deposit	19.67					
Commercial Paper	8.85					
Medium Term Notes	0.29					
TOTAL	100.00%					

Totals may not add due to rounding.

Source: Office of the Treasurer & Tax Collector of the City and County of San Francisco.

As of June 30, 2018, the book value of the Airport's cash and investments held in the City Pool was estimated to be approximately \$1.8 billion.

BOOK VALUE OF AIRPORT FUNDS IN CITY POOLED INVESTMENT FUND

(as of June 30, 2018)						
Construction Funds	\$986.9 million					
Operating Fund	309.3 million					
Contingency Account	131.5 million					
PFC Funds	384.7 million					
Special Revenue Fund	1.1 million					
TOTAL	\$1,813.6 million					
Source: Commission.						

[Remainder of Page Intentionally Left Blank]

Currently Outstanding Bonds

The Commission had outstanding \$7,300,825,000 in aggregate principal amount of Second Series Revenue B onds as of July 1, 2019. Some of these B onds, or portions thereof, are expected to be refunded on the date of issuance of the Series 2019E-H B onds with certain proceeds of the Series 2019G B onds and Series 2019H B onds and certain other available moneys of the Commission. See "PLAN OF FINANCE AND REFUNDING-Refunding Plan for Refunded B onds" and APPENDIX I - "LIST OF REFUNDED B ONDS." In addition, some small amounts of certain B onds that are not identified in APPENDIX I will be defeased in September 2019 from Commission funds other than proceeds of the Series 2019E-H B onds.

Series	Dated Date	Outstanding Principal (as of 7/1/19)	Purpose
Issue 32F (Non-AMT)†	November 16, 2006	\$36,470,000	Refunding
Issue 37C (Non-AMT/Private Activity) †*	May 15, 2008	82,500,000	Refunding
2009A (Non-AMT/Private Activity) †	September 3, 2009	84,305,000	Refunding
2009B (Non-AMT/Private Activity)†	September 3, 2009	75,905,000	Refunding
2009C (Non-AMT/Private Activity)‡	November 3, 2009	19,080,000	Refunding
2009D (Non-AMT/Private Activity) †	November 4, 2009	54,225,000	Refunding
2010A (AMT)	February 10, 2010	200,885,000	Refunding
2010C (Non-AMT/Governmental Purpose) †	April 7, 2010	81,760,000	Refunding
2010D (Non-AMT/Private Activity)‡	April 7, 2010	32,215,000	Refunding
2010F (Non-AMT/Private Activity)†	August 5, 2010	121,360,000	New Money
2010G (Non-AMT/Governmental Purpose) †	August 5, 2010	7,100,000	New Money
2011B (Non-AMT/Governmental Purpose)†	February 22, 2011	12,880,000	Refunding
2011C (AMT)†	July 21, 2011	157,720,000	Refunding
2011D (Non-AMT/Governmental Purpose)†	July 21, 2011	84,865,000	Refunding
2011E (Taxable)†	July 21, 2011	805,000	Refunding
2011F (AMT)†	September 20, 2011	123,325,000	Refunding
2011G (Non-AMT/Governmental Purpose)†	September 20, 2011	29,660,000	Refunding
2011H (Taxable)†	September 20, 2011	28,380,000	Refunding
2012A (AMT)†	March 22, 2012	208,025,000	Refunding
2012B (Non-AMT/Governmental Purpose)†	March 22, 2012	107,465,000	Refunding
2013A (AMT)†	July 31, 2013	319,080,000	New Money
2013B (Non-AMT/Governmental Purpose)†	July 31, 2013	87,860,000	New Money
2014A (AMT)†	September 24, 2014	376,320,000	New Money
2014B (Non-AMT/Governmental Purpose)†	September 24, 2014	97,290,000	New Money
2016A (Non-AMT/Governmental Purpose)†	February 25, 2016	232,075,000	Refunding
2016B (AMT)†	September 29, 2016	574,970,000	New Money
2016C (Non-AMT/Governmental Purpose) †	September 29, 2016	165,155,000	New Money
2016D (Non-AMT/Governmental Purpose) †	September 29, 2016	146,895,000	Refunding
2017A (AMT) †	October 31, 2017	339,585,000	New Money
2017B (Non-AMT)†	October 31, 2017	231,985,000	New Money
2017C (Taxable) ^Ω	October 31, 2017	20,930,000	New Money
2017D (AMT) ^Ω	October 31, 2017	144,830,000	Refunding
2018A (AMT) ^Ω	February 1, 2018	93,245,000	Refunding
2018D (AMT) †	May 30, 2018	722,805,000	New Money
2018E (Non-AMT)†	May 30, 2018	116,275,000	New Money
2018F (Taxable) †	May 30, 2018	7,025,000	New Money
2018G (AMT) †	May 30, 2018	35,665,000	Refunding
2018B (Non-AMT)	June 6, 2018	138,170,000	New Money
2018C (Non-AMT)	June 6, 2018	138,170,000	New Money
2019A (AMT) †	February 7, 2019	1,176,215,000	New Money
2019B (Non-AMT) ^Ω	February 7, 2019	91,280,000	New Money
2019C (Taxable) †	February 7, 2019	88,750,000	New Money/Refunding
2019D (Non-AMT) ^Ω	February 7, 2019	<u>407,320,000</u> \$7,300,825,000	Refunding
TOTAL		<u>\$7,500,625,000</u>	

^{*} This Issue of B onds was converted to B onds the interest on which is not subject to the federal alternative minimum tax.

Source: Commission.

[†] Secured by Original Reserve Account. See "SECURITY FOR THE SERIES 2019E-H BONDS-Reserve Fund; Reserve Accounts; Credit Facilities-Original Reserve Account."

[‡] Secured by 2009 Reserve Account. See "SECURITY FOR THE SERIES 2019E-H BONDS-Reserve Fund; Reserve Accounts; Credit Facilities-2009 Reserve Account."

^Ω Secured by 2017 Reserve Account. See "SECURITY FOR THE SERIES 2019E-H BONDS-Reserve Fund; Reserve Accounts; Credit Facilities-2017 Reserve Account."

Additional Bonds are expected to be a significant source of funding for the Commission's Capital Improvement Plan. See "CERTAIN RISK FACTORS-Risks Related to the Commission's Capital Projects" and "CAPITAL PROJECTS AND PLANNING-The Capital Improvement Plan."

Credit Facilities

As of July 1, 2019, the Commission had outstanding \$559,725,000 of variable rate tender option Bonds, secured by bank letters of credit, as summarized in the table below. If amounts due on the Bonds are paid under a letter of credit, the obligation of the Commission to repay such amounts would constitute "Repayment Obligations" under the 1991 Master Resolution and would be accorded the status of Bonds. See "Security for the Series 2019E-H Bonds-Additional Bonds-Repayment Obligations."

CREDIT FACILITIES FOR BONDS

	I ssue 37C ⁽¹⁾	Series 2010A ⁽¹⁾	Series 2018B	Series 2018C
Outstanding Principal Amount	\$82,500,000	\$200,885,000	\$138,170,000	\$138,170,000
Type	LOC ⁽²⁾	LOC ⁽²⁾	LOC ⁽²⁾	LOC ⁽²⁾
Expiration Date	January 27, 2020	June 29, 2020	June 3, 2022	June 3, 2022
Credit Provider	Union B ank ⁽³⁾	B of A ⁽⁴⁾	B arclays ⁽⁵⁾	Sumitomo ⁽⁶⁾
Credit Provider Ratings ⁽⁷⁾				
Short-Term	P-1/A-1/F1	P-1/A-1/F1+	P-1/A-1/F1	P-1/A-1/F1
Long-Term	A2/A/A	Aa2/A+/AA-	A2/A/A+	A1/A/A

⁽¹⁾ All of the Issue 37C Bonds and a portion of the Series 2010A Bonds are expected to be refunded on the date of issuance of the Series 2019E – H Bonds. See "PLAN OF FINANCE AND REFUNDING—Refunding Plan for Refunded Bonds" and APPENDIX I-"LIST OF REFUNDED BONDS."

- (2) Letter of Credit.
- (3) MUFG Union Bank, N.A.
- (4) Bank of America, N.A.
- (5) Barclays Bank PLC.
- (6) Sumitomo Mitsui Banking Corporation acting through its New York Branch.
- As of July 1, 2019. Ratings are provided for convenience of reference only. Such rating information has been obtained from sources believed to be reliable but has not been confirmed or re-verified by the rating agencies. The Commission does not take any responsibility for the accuracy of such ratings, nor does it give any assurance that such ratings will apply for any given period of time, or that such ratings will not be revised downward or withdrawn if, in the judgment of the agency providing such rating, circumstances so warrant. The rating information reflects the ratings of the credit provider's obligations, not the rating on the related B onds; ratings on related B onds may be different. Ratings for the Credit Providers' obligations are displayed as Moody's,S&P,Fitch. The Long-Term ratings provided are Moody's Issuer Rating, Standard & Poor's Long-Term Local Issuer Credit Rating and Fitch's Long-Term Issuer Default Rating. The Short-Term ratings provided are Moody's Short-Term Rating, Standard & Poor's Short-Term Local Issuer Credit Rating and Fitch's Short-Term Issuer Default Rating None of the above-referenced credit providers has provided any information for inclusion in this Official Statement or has independently verified or reviewed, made any representation regarding, or accepted any responsibility for the accuracy or completeness of this Official Statement.

Source: Commission

In addition to the credit facilities described above, the Commission has obtained four irrevocable direct-pay letters of credit to support its Commercial Paper Notes. Repayment of amounts drawn on these letters of credit are secured by a lien on Net Revenues that is subordinate to the lien of the 1991 Master Resolution securing the Bonds. See "Security for the Series 2019E-H Bonds-Other Indebtedness-Subordinate Bonds" for additional information concerning these letters of credit.

Interest Rate Swaps

Pursuant to the 1991 Master Resolution, the Commission may enter into one or more interest rate swaps in connection with one or more series of B onds. An interest rate swap is an agreement between the Commission or the Trustee and a Swap Counterparty under which a variable rate cash flow (which may be subject to an interest rate cap) on a principal or notional amount is exchanged for a fixed rate of return on an equal principal or notional amount. The Swap Counterparty must be a member of the International Swaps and Derivatives Association and must be rated in one of the three top rating categories by at least one rating agency. The 1991 Master Resolution provides that, if and to the extent provided in any Supplemental Resolution authorizing the issuance of a series of B onds, regularly scheduled swap payments may be paid directly out of the account or accounts in the Debt Service Fund established with respect to such series of B onds, and thus on a parity with debt service on the B onds.

Individual Interest Rate Swap Agreements

The obligation of the Commission to make regularly scheduled payments to the Swap Provider under the Swap Agreements is an obligation of the Commission payable from Net Revenues on a parity with payments of principal of or interest on the Bonds. The Swap Agreements are subject to termination upon the occurrence of specified events and the Commission may be required to make a substantial termination payment to the respective Swap Provider depending on the then-current market value of the swap transaction even if the Commission were not the defaulting party. The termination payment would be approximately equal to the economic value realized by the Commission from the termination of the Swap Agreement. Any payment due upon the termination of a Swap Agreement is payable from Net Revenues subordinate to payments of principal of or interest on the Bonds. All of the Swap Agreements are terminable at any time at the option of the Commission at their market value. The objective of each of the Swap Agreements was to secure a synthetic fixed interest rate obligation with respect to the related B onds.

Swap Policy

The Commission has adopted a written Interest Rate Swap Policy (the "Swap Policy"), which establishes the Commission's policies for entering into new interest rate swap agreements. The Swap Policy is reviewed periodically by the Airport Director and revisions are submitted to the Commission for approval. The Swap Policy prohibits the Commission from entering into interest rate swaps or other derivative instruments for speculative purposes or to create extraordinary risk or leverage with respect to the related B onds or investments, or that would result in the Commission lacking sufficient liquidity to make payments that may be due upon termination of the Swap or that lack sufficient price transparency to permit the Airport Director and the swap advisor to reasonably determine the market valuation of the Swap. The Swap Policy sets forth, among other things, criteria for qualified swap counterparties, maximum notional amounts of interest rate swap agreements and swap counterparty credit exposure limits.

Risks of Interest Rate Swap Agreements

The Commission's interest rate swap agreements entail risk to the Commission. Although the Commission intends that its interest rate swap agreements hedge various series of variable rate B onds, the floating rate that the Commission receives under an interest rate swap agreement can materially differ from the variable rate of interest the Commission pays on its variable rate B onds. This can reduce the effectiveness of an interest rate swap agreement as a hedge. In addition, the counterparties to the Commission's interest rate swap agreements may terminate the respective swaps upon the occurrence of specified termination events or events of default, which may include failure of the Commission or the counterparty to maintain credit ratings at required levels. If either the counterparty or the Commission terminates any interest rate swap agreement, the Commission may be required to make a termination payment to the counterparty (even if such termination is due to an event affecting the counterparty, including the counterparty's failure to maintain credit ratings at required levels), and any such payment could materially adversely impact the Commission's financial condition. The valuation of the swaps is volatile, and will vary based on a variety of factors, including current interest rates.

[Remainder of Page Intentionally Left Blank]

The table below summarizes the interest rate swap agreements entered into by the Commission as of July 1, 2019.

SUMMARY OF INTEREST RATE SWAP AGREEMENTS

Associated Bonds	Effective Date	Outstanding Notional Amount	Counterparty	Counterparty Credit Ratings (Moody's/S&P/Fitch) ⁽¹⁾	Insurer	Fixed Rate Payable by Commission	Market Value to Commission ⁽²⁾	Expiration Date
Issue 37B (3)(7)	05/15/2008	\$ 73,137,000	Merrill Lynch Capital Services (4)	NR/NR/NR	AGM	3.773%	(\$10,337,177.73)	May 1, 2029
Issue 37C ⁽⁷⁾	05/15/2008	82,473,000	JPMorgan Chase Bank, N.A. ⁽⁵⁾	Aa2/A+/AA	AGM	3.898	(12,535,638.70)	May 1, 2029
Series 2010A-1/A-2	02/01/2010	134,660,000	Goldman Sachs Bank USA ⁽⁶⁾	A1/A+/A+		3.925	(23,146,401.03)	May 1, 2030
	TOTAL	\$290,270,000					(\$46,019,217.46)	

⁽¹⁾ As of July 1, 2019. Ratings are provided for convenience of reference only. Such rating information has been obtained from sources believed to be reliable but has not been confirmed or re-verified by the rating agencies. The Commission takes no responsibility for the accuracy of such ratings, or gives any assurance that such ratings will apply for any given period of time, or that such ratings will not be revised downward or withdrawn if, in the judgment of the agency providing such rating, circumstances so warrant. The ratings provided are Moody's Issuer Rating, S&P's Long-Term Local Issuer Credit Rating and Fitch's Long-Term Issuer Default Rating.

(2) The market values of the swaps were calculated as of July 1, 2019 by an independent third-party consultant to the Commission who does not have an interest in the Swap Agreements.

Source: Commission.

Debt Service Requirements

The table on the following page presents the annual debt service requirements for the Series 2019E-H Bonds and the Outstanding Bonds, based upon monthly deposits.

[Remainder of Page Intentionally Left Blank]

⁽³⁾ The Issue 37B Bonds that are hedged by this swap agreement were purchased with proceeds of the Series 2008B Notes, which the Commission subsequently refunded, and the Issue 37B Bonds are held in trust. The swap is now indirectly hedging the Series 2010A-3 Bonds.

⁽⁴⁾ Guaranteed by Merrill Lynch Derivative Products AG, which is rated Aa3/AA/NR as of July 1, 2019.

⁽⁵⁾ The original counterparty to this swap agreement was Bear Steams Capital Markets Inc.

⁽⁶⁾ Guaranteed by The Goldman Sachs Group, which is rated A 3/BBB +/A as of July 1, 2019.

⁽⁷⁾ The Commission terminated these swaps on August 9, 2019.

DEBT SERVICE SCHEDULE(1)

Fiscal Year Ending	Debt Service on Outstanding		19E Bonds		19F Bonds	Series 2019		Series 201		Total Series 2019E -H Debt	Aggregate
J une 30	B onds ⁽²⁾	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Service	Debt Service
2020	\$ 456,237,149	\$ -	\$ 3,605,834	\$ -	\$ 625,666	\$ 5,339,167	\$ 525,128	\$ 19,721,667	\$10,678,535	\$ 40,495,997	\$ 496,733,145
2021	459,954,797	-	17,340,281	_	3,934,019	8,781,667	601,854	33,879,167	12,364,167	76,901,155	536,855,951
2022	517,435,249	-	31,319,253	-	5,207,782	8,751,667	540,963	18,357,500	10,670,208	74,847,372	592,282,622
2023	523,219,213	_	36,779,438	_	5,346,250	7,040,833	393,197	21,364,167	9,752,333	80,676,218	603,895,431
2024	499,338,630	_	37,673,750	_	5,346,250	2,396,667	261,273	31,330,833	8,684,125	85,692,898	585,031,528
2025	512,079,417	-	37,673,750	_	5,346,250	1,535,833	213,687	31,807,500	7,117,583	83,694,604	595,774,021
2026	508,428,169	-	37,673,750	-	5,346,250	1,570,833	181,808	18,644,167	5,527,208	68,944,016	577,372,186
2027	480,991,641	-	37,673,750	-	5,346,250	1,605,833	147,565	33,667,500	4,595,000	83,035,899	564,027,540
2028	484,782,909	-	37,673,750	-	5,346,250	1,640,833	111,410	29,880,833	2,911,625	77,564,702	562,347,611
2029	385,145,673	_	37,673,750	_	5,346,250	1,677,500	73,647	20,530,833	1,417,583	66,719,563	451,865,237
2030	344,598,125	_	37,673,750	_	5,346,250	1,429,167	34,200	7,820,833	391,042	52,695,242	397,293,367
2031	305,324,072	_	37,673,750	_	5,346,250	_	_	_	_	43,020,000	348,344,072
2032	315,220,544	-	37,673,750	_	5,346,250	_	-	_	-	43,020,000	358,240,544
2033	428,174,133	3,159,167	37,673,750	_	5,346,250	_	-	_	-	46,179,167	474,353,300
2034	309,393,074	19,112,500	37,515,792	_	5,346,250	_	-	_	-	61,974,542	371,367,616
2035	309,766,320	20,065,833	36,560,167	_	5,346,250	_	-	-	-	61,972,250	371,738,570
2036	310,159,654	21,069,167	35,556,875	_	5,346,250	_	-	-	_	61,972,292	372,131,946
2037	329,541,450	22,123,333	34,503,417	_	5,346,250	_	-	-	_	61,973,000	391,514,450
2038	430,051,282	23,231,667	33,397,250	_	5,346,250	_	_	_	_	61,975,167	492,026,449
2039	457,851,653	24,391,667	32,235,667	_	5,346,250	_	_	_	_	61,973,583	519,825,236
2040	472,884,283	25,611,667	31,016,083	_	5,346,250	-	_	=	_	61,974,000	534,858,283
2041	473,241,302	26,892,500	29,735,500	_	5,346,250	_	_	_	_	61,974,250	535,215,552
2042	473,590,664	28,238,333	28,390,875	_	5,346,250	_	_	_	_	61,975,458	535,566,122
2043	473,569,111	29,650,000	26,978,958	_	5,346,250	_	_	_	_	61,975,208	535,544,319
2044	473,473,307	28,511,667	25,496,458	2,620,000	5,346,250	_	-	-	-	61,974,375	535,447,682
2045	473,311,936	16,835,000	24,070,875	15,850,833	5,215,250	_	-	-	-	61,971,958	535,283,894
2046	473,188,971	17,675,000	23,235,158	16,642,500	4,422,708	_	_	_	_	61,975,367	535,164,338
2047	473,058,580	18,520,833	22,387,883	17,475,000	3,590,583	-	-	-	-	61,974,300	535,032,880
2048	472,369,782	19,405,000	21,500,000	18,350,833	2,716,833	-	-	-	-	61,972,667	534,342,449
2049	394,420,047	85,510,833	20,569,775	19,265,000	1,799,292	-	-	-	-	127,144,900	521,564,947
2050	19,278,364	343,470,833	16,469,708	16,720,833	836,042	_	_	_	_	377,497,417	396,775,781
2051	19,120,645	_	_	_	_	_	_	_	_	-	19,120,645
2052	18,965,712	_	_	_	_	_	_	_	_	-	18,965,712
2053	18,777,104	-	_	-	-	_	-	-	-	-	18,777,104
2054	18,609,164	-	_	-	-	_	-	-	-	_	18,609,164
2055	18,423,323	-	_	-	-	_	-	-	-	_	18,423,323
2056	18,236,108	_	_	_	_	_	_	_	_	_	18,236,108
2057	18,033,950	_	_	_	_	_	_	_	_	_	18,033,950
2058	14,905,609	_	_	_	_	_	_	_	_	_	14,905,609
2059	22,384			_	_		_				22,384
Total ⁽³⁾	\$13,185,173,499	\$773,475,000	\$945,402,748	\$106,925,000	\$145,965,675	\$41,770,000	\$3,084,731	\$267,005,000	\$74,109,410	\$2,357,737,565	\$15,542,911,064

Net debt service. Does not include interest amounts expected to be paid from B ond proceeds. B ased on monthly interest and principal deposits.

Excludes debt service on the Refunded B onds. Includes credit facility and other ancillary fees with respect to variable rate bonds. In calculating the debt service for B onds issued at variable rates, the Commission has made assumptions about interest rates, swap payments and ancillary fees; assumed annual costs range between 5.1% and 5.5% for interest payments, net swap payments and fees.

⁽³⁾ Various totals do not add due to rounding.

Historical Debt Service Coverage

The following table reflects historical Net Revenues and the calculation of debt service coverage on the Bonds based on such Net Revenues for Fiscal Years 2013–14 through 2017–18.

HISTORICAL DEBT SERVICE COVERAGE (Fiscal Year) (\$ in thousands)

	2013-14	2014-15	2015-16	2016–17	2017-18
Net Revenues ⁽¹⁾	\$367,336	\$391,831	\$430,333	\$466,015	\$493,304
PFCs Treated as Revenues	35,700	47,550	43,110	23,363	4,068
Transfer from the Contingency Account ⁽²⁾	93,327	93,883	94,426	95,221	132,000
TOTAL AVAILABLE FOR DEBT SERVICE	\$496,363	\$533,264	\$567,869	\$584,599	\$629,372
Total Annual Debt Service ⁽³⁾	\$365,314	\$393,449	\$394,157	\$404,555	\$405,341
Historical Debt Service Coverage per the					
1991 Master Resolution ⁽⁴⁾	135.9%	135.5%	144.1%	144.5%	155.3%
Historical Debt Service Coverage Excluding					
Transfer	110.3%	111. 7 %	120.1%	121.0%	122.7%

⁽¹⁾ Using the definition of Net Revenues contained in the 1991 Master Resolution, but excluding PFCs treated as "Revenues" pursuant to the 1991 Master Resolution. See "-Passenger Facility Charge."

Source: Commission.

SFOTEC

The San Francisco Terminal Equipment Company, LLC ("SFOTEC") is a consortium of airlines that was formed to use, operate and maintain certain Airport-owned equipment and systems related to handling flights and passengers at the ITC. This equipment, which includes computer check-in systems with baggage and boarding pass printers, baggage handling systems, passenger boarding bridges, systems for delivering preconditioned air to aircraft and ground power for aircraft, was acquired by the Airport with approximately \$100 million of Airport bond proceeds. SFOTEC also manages the daily assignment of the ITC joint use gates, holdrooms, ticket counters and baggage systems for the airlines (including some domestic airlines) operating in the ITC in accordance with the Lease and Use Agreement and with Airport-approved protocols.

The Airport and SFOTEC have entered into an agreement through J une 30, 2021, pursuant to which SFOTEC is obligated to maintain, operate, repair and schedule the use of such equipment; pay the associated utility and custodial costs; and provide nondiscriminatory access to such equipment for all ITC carriers, whether or not they are members of SFOTEC. The costs of operating and maintaining the equipment are shared by all airline users of the equipment. The user fees for airlines that are members of SFOTEC are determined pursuant the terms of the SFOTEC Members Agreement. Nonmember airlines are subject to a separate rate based on use.

REPORT OF THE AIRPORT CONSULTANT

General

The Commission has retained LeighFisher, as recognized experts in their field, to prepare a report on traffic, revenues, expenses, the Capital Improvement Plan and financial analyses in connection with the issuance of the Series 2019E B onds, the Series 2019F B onds and the Series 2019G B onds (but not the Series 2019H B onds). The Airport Consultant has consented to the Report of the Airport Consultant, dated July 31, 2019, being included as APPENDIX A. This Report should be read in its entirety for an explanation of the assumptions and methodology used therein.

⁽²⁾ Represents the Transfer from the Contingency Account to the Revenues Account in each such Fiscal Year. See "SECURITY FOR THE SERIES 2019E-H BONDS-Contingency Account."

⁽³⁾ Annual Debt Service net of accrued and capitalized interest.

⁽⁴⁾ Net Revenues plus Transfer divided by total Annual Debt Service. Must not be less than 125% pursuant to the 1991 Master Resolution. See "SECURITY FOR THE SERIES 2019E-H BONDS-Rate Covenant."

In the preparation of the forecasts in its Report, the Airport Consultant has made certain assumptions with respect to conditions that may occur and the course of action that management expects to take in the future. The Airport Consultant has relied upon Commission staff for representations about its plans and expectations and for disclosure of significant information that might affect the realization of forecast results. Commission staff has reviewed these assumptions and concur that they provide a reasonable basis for the forecast. While the Commission and the Airport Consultant believe these assumptions to be reasonable for the purpose of the forecasts, they are dependent upon future events, and actual conditions may differ from those assumed in the analysis. To the extent actual future factors differ from those assumed by the Airport Consultant or provided to the Airport Consultant by others, the actual results could vary materially from those forecast. The Airport Consultant has no responsibility to update its Report for events and circumstances occurring after the date of its Report. The forecast is based on assumptions that may not be realized and actual results may differ materially from the forecast. See "Certain Risk Factors-Uncertainties of Projections, Forecasts and Assumptions."

Forecast financial information for the On-Airport Hotel (including forecast revenues and expenses associated with the operation of the On-Airport Hotel) are based upon assumptions made by JLL, the Commission's hotel consultant, and are not assumptions made by the Airport Consultant. The On-Airport Hotel financial forecast is documented in the report titled: "Hotel Market and Underwriting Study: Grand Hyatt at SFO," dated May 2, 2018, which was prepared by JLL. The On-Airport Hotel financial forecast has not been updated since May 2, 2018. Inevitably some assumptions used to develop the On-Airport Hotel financial forecast will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecast, and the variations could be material. See "CERTAIN RISK FACTORS-Uncertainties of Projections, Forecasts and Assumptions."

Forecast of Debt Service Coverage

The following table reflects the estimated net revenues and debt service coverage on the B onds for Fiscal Year 2018–19 and forecast of Net Revenues and the calculation of debt service coverage on the B onds (including the Series 2019E B onds, Series 2019F B onds and Series 2019G B onds) based on such Net Revenues for Fiscal Year 2019–20 through Fiscal Year 2025–26 as set forth in Section 5 of the Report of the Airport Consultant attached hereto as APPENDIX A. Such forecast reflects the impact on revenues and expenses associated with the Series 2019E B onds, Series 2019F B onds and Series 2019G B onds as well as other B ond issues expected to be undertaken during the forecast period. The forecast does not reflect the Series 2019H B onds or the refunding of the Refunded B onds. The forecast does not reflect the impact on Commission finances of capital projects that are in the conceptual planning stage or any other projects that may be undertaken in the future, including projects in the Recommended ADP described under "CAPITAL PROJECTS AND PLANNING-Airport Development Plan" (as described in the Report of the Airport Consultant). Any additional future capital projects may be financed by future B ond issues.

[Remainder of Page Intentionally Left Blank]

FORECAST OF DEBT SERVICE COVERAGE (Fiscal Year) (\$ in thousands)

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Net Revenues ⁽¹⁾	\$540,379	\$584,290	\$653,925	\$747,242	843,659	\$891,602	\$898,659	\$881,732
Transfer from the Contingency Account*	115,877	124,357	138,639	164,945	184,431	198,987	204,012	199,356
TOTAL AVAILABLE FOR DEBT SERVICE Debt Service Requirement ⁽²⁾	656,255	708,646	792,564	912,186	1,028,091	1,090,589	1,102,671	1,081,088
	\$463,506	\$497,426	\$554,556	\$659,778	\$737,725	\$795,948	\$816,050	\$797,425
Forecast Debt Service Coverage per the Resolution	142%	142%	143%	138%	139%	137%	135%	136%
Forecast Debt Service Coverage Excluding Transfer	117%	117%	118%	113%	114%	112%	110%	111%

⁽¹⁾ Includes certain PFC revenues forecast to be designated as Revenues by the Commission, as described in the Report of the Airport Consultant. As discussed in the Report of the Airport Consultant, forecast revenues and expenses for the On-Airport Hotel were prepared by JLL. The Airport Consultant makes no representation regarding the reasonableness of the forecast financial results provided by JLL for the proposed On-Airport Hotel.

Source LeighFisher, Report of the Airport Consultant.

The Report of the Airport Consultant and the forecast of Net Revenues and debt service coverage included therein incorporated assumptions of the debt service on the Series 2019E B onds, the Series 2019F B onds, the Series 2019G B onds, the Commission's outstanding variable rate B onds and B onds to be issued during each of the forecasted years based upon projections provided by Public Financial Management, Inc., co-financial advisor in July 2019. The Report assumes that the aggregate principal amount of the Series 2019E B onds, Series 2019F B onds and Series 2019G B onds is \$982.9 million and that they have an all-in true interest cost of 4.2%. The Report has not been updated to reflect the final terms of the Series 2019E B onds, Series 2019F B onds and Series 2019G B onds and does not reflect the issuance of the Series 2019H B onds and related refunding.

In addition, the forecast is based on other assumptions that may not be realized and actual results may differ materially from the forecast. The Report should be read in its entirety for an explanation of the assumptions and methodology used in developing the forecast. Also see "CERTAIN RISK FACTORS-Uncertainties of Projections, Forecasts and Assumptions."

AIRLINE INFORMATION

The Commission cannot and does not assume any responsibility for the accuracy or completeness of any information contained or referred to herein regarding the business operations or financial condition of any of the airlines serving the Airport.

Each of the principal domestic airlines serving the Airport, or their respective parent corporations, and foreign airlines serving the Airport with American Depository Receipts ("ADRs") registered on a national exchange are subject to the information requirements of the Securities Exchange Act of 1934, and in accordance therewith files reports and other information with the SEC. Certain information, including financial information, concerning such domestic airlines or their respective parent corporations and such foreign airlines, is disclosed in certain reports and statements filed with the SEC. Such reports and statements can be inspected at the Public Reference Room of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549; and the offices of The New York Stock Exchange, Inc., 20 B road Street, New York, New York 10005 (for certain airlines whose stock or whose parent's stock is traded on the New York Stock Exchange). Copies of such reports and statements can be obtained from the Public Reference

⁽²⁾ Cash basis. Includes projected debt service on outstanding Bonds, Series 2019E Bonds, Series 2019F Bonds, Series 2019G Bonds and future Bonds as described in the Report of the Airport Consultant.

^{*} Transfer reflects lesser of Contingency Account balance or 25% of Debt Service.

Room, at prescribed rates or from the SEC website at: http://www.sec.gov (the information on such web site is <u>not</u> incorporated by reference herein). In addition, each airline is required to file periodic reports of financial operating statistics with the U.S. DOT. Such reports can be inspected at the Bureau of Transportation Statistics, Research and Innovative Technology Administration, Department of Transportation, 400 Seventh Street, S.W., Washington, D.C. 20590.

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

LITIGATION MATTERS

There is no litigation pending concerning the validity of the 1991 Master Resolution or the Series 2019E-H B onds or the issuance or delivery thereof, the existence of the Commission, the title of the officers thereof who executed or will execute the Series 2019E-H B onds to their respective offices, or the pledge of Net Revenues to the payment of the Series 2019E-H B onds.

In the regular course of the Airport's business, the Commission and the City are parties to a variety of pending and threatened lawsuits and administrative proceedings with respect to the Airport's operations and other matters, in addition to those specifically discussed herein. The Commission does not believe that any such lawsuits or proceedings will have a material adverse effect on the Airport's business operations or financial condition.

RATINGS

Moody's has assigned a rating of "A1" (stable outlook), S&P has assigned a rating of "A+" (stable outlook) and Fitch Ratings, Inc. ("Fitch") has assigned a rating of "A+" (stable outlook) to the Series 2019E-H B onds.

A rating reflects only the view of the agency giving such rating and is not a recommendation to buy, sell or hold the Series 2019E-H Bonds. An explanation of the significance of each rating may be obtained from the rating agencies at their respective addresses, as follows: Moody's, 7 World Trade Center, at 250 Greenwich Street, New York, New York 10007; S&P, 55 Water Street, New York, New York 10041 and Fitch, One State Street Plaza, New York, New York 10004. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that a rating will apply for any given period of time, or that the rating will not be revised downward or withdrawn if, in the judgment of the agency providing such rating, circumstances so warrant. The Commission undertakes no responsibility to maintain any rating or to oppose any revision or withdrawal of a rating. A downward revision or withdrawal of a rating may have a material adverse effect on the marketability or market price of the Series 2019E-H B onds.

UNDERWRITING

Purchase of Series 2019E-H Bonds

B arclays Capital Inc., on its own behalf and as representative of the other underwriters identified on the cover hereof (together with B arclays Capital Inc., the "Underwriters") has entered into a B ond Purchase Contract between the Commission and the Underwriters (the "B ond Purchase Contract") that commits the Underwriters to purchase the Series 2019E-H B onds, subject to the terms and conditions set forth in the B ond Purchase Contract. The B ond Purchase Contract provides that the Underwriters will purchase all of the Series 2019E-H B onds if any are purchased.

The Series 2019E-H B onds are being purchased through negotiation by the Underwriters at a purchase price equal to \$1,431,342,221.51 (representing the principal amount of the Series 2019E-H B onds, plus original issue premium equal to \$244,069,005.15 and less an underwriters' discount equal to \$1,901,783.64) pursuant to the B ond Purchase Contract.

The Underwriters may offer and sell the Series 2019E-H B onds to certain dealers and others at prices lower than the public offering prices set forth on the inside cover. The initial public offering prices may be changed from time to time by the related Underwriters. See "CERTAIN RELATIONSHIPS" below.

Retail Brokerage Arrangements

The following paragraphs have been provided by and are being included in this Official Statement at the request of the respective Underwriters. The Commission does not assume any responsibility for the accuracy or completeness of such statements or information.

B of A Securities, Inc., an underwriter of the Series 2019E-H B onds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, B of A 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, B of A Securities, Inc. may compensate MLPF&S as a dealer for their selling efforts with respect to the Series 2019E-H B onds.

Citigroup Global Markets Inc., an underwriter of the Series 2019E-H Bonds, has entered into a retail distribution agreement with Fidelity Capital Markets, a division of National Financial Services LLC (together with its affiliates, "Fidelity"). Under this distribution agreement, Citigroup Global Markets Inc. may distribute municipal securities to retail investors at the original issue price through Fidelity. As part of this arrangement, Citigroup Global Markets Inc. will compensate Fidelity for its selling efforts.

CERTAIN RELATIONSHIPS

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

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

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

In addition, the Underwriters may currently be serving as underwriters, remarketing agents or dealers in connection with the Commission's other outstanding obligations, including the Commission's Commercial Paper Notes, or as swap counterparties under interest rate swap agreements to which the Commission is a party. A swap for which an affiliate of B of A Securities, Inc. is a counterparty was terminated in conjunction with the defeasance of the Refunded B onds and the termination payment was made from Commercial Paper Notes that are expected to be repaid from the proceeds of the Series 2019G B onds. For a description of certain relationships of the Underwriters to the Commission, see "AIRPORT'S FINANCIAL AND RELATED INFORMATION—Credit Facilities" and "—Interest Rate Swaps."

TAX MATTERS

In the opinion of Squire Patton B oggs (US) LLP and Amira Jackmon, Attorney at Law, Co-B ond Counsel to the Commission, under existing law: (i) interest on the Series 2019E B onds, the Series 2019F B onds and the Series 2019H B onds (collectively, the "Tax-Exempt B onds") is excluded from gross income for federal income tax purposes

under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except interest on any Series 2019E B ond and any Series 2019H B ond for any period during which that Series 2019E B ond or Series 2019H B ond is held by a "substantial user" or a "related person," as those terms are used in Section 147(a) of the Code; (ii) interest on the Series 2019E Bonds and the Series 2019H Bonds is an item of tax preference for purposes of the federal alternative minimum tax imposed under the Code; (iii) interest on the Series 2019F B onds is not an item of tax preference for purposes of the federal alternative minimum tax imposed under the Code: and (iv) interest on the Series 2019E-H B onds is exempt from State of California personal income taxes. Co-B ond Counsel expresses no opinion as to any other tax consequences regarding the Series 2019E-H Bonds. INTEREST ON THE SERIES 2019G BONDS IS NOT EXCLUDED FROM GROSS INCOME FOR FEDERAL INCOME TAX PURPOSES. DEFEASANCE OF THE SERIES 2019G BONDS MAY RESULT IN A DEEMED SALE OR EXCHANGE OF THE SERIES 2019G BONDS UNDER CERTAIN CIRCUMSTANCES: OWNERS OF THE SERIES 2019G BONDS SHOULD CONSULT THEIR TAX ADVISORS AS TO THE FEDERAL INCOME TAX CONSEQUENCES OF SUCH AN EVENT. PROSPECTIVE PURCHASERS OF THE SERIES 2019G BONDS SHOULD CONSULT THEIR TAX ADVISORS AS TO THE FEDERAL, STATE, LOCAL AND FOREIGN TAX CONSEQUENCES OF THEIR ACQUISITION, OWNERSHIP AND DISPOSITION OF THE SERIES 2019G BONDS.

Tax-Exempt Bonds

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

The opinions of Co-B ond Counsel are based on current legal authority and cover certain matters not directly addressed by such authority. Those opinions represent Co-B ond Counsel's legal judgment as to exclusion of interest on the Tax-E xempt B onds from gross income for federal income tax purposes but are not a guaranty of that conclusion. The opinions are not binding on the Internal Revenue Service (the "IRS") or any court. Co-B ond Counsel express no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

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

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

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

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

Prospective purchasers of the Tax-Exempt Bonds upon their original issuance at prices other than the respective prices indicated on the pages immediately following the front cover of this Official Statement, and prospective purchasers of the Tax-Exempt Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Co-B ond Counsel express no opinion.

Risk of Future Legislative Changes and/or Court Decisions

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

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

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

Original Issue Premium

All of the Tax-Exempt B onds ("Premium Tax-Exempt B onds") have been offered and sold to the public at a price in excess of their stated redemption price at maturity (the principal amount). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium Tax-Exempt B ond, based on the yield to maturity of that Premium Tax-Exempt B ond (or, in the case of a Premium Tax-Exempt B ond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium Tax-Exempt B ond), compounded semiannually. No portion of that bond premium is deductible by the owner of a Premium Tax-Exempt B ond. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium Tax-Exempt B ond, the owner's tax basis in the Premium Tax-Exempt B ond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may

realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium Tax-Exempt B ond for an amount equal to or less than the amount paid by the owner for that Premium Tax-Exempt B ond. A purchaser of a Premium Tax-Exempt B ond in the initial public offering who holds that Premium Tax-Exempt B ond to maturity (or, in the case of a callable Premium Tax-Exempt B ond, to its earlier call date that results in the lowest yield on that Premium Tax-Exempt B ond) will realize no gain or loss upon the retirement of that Premium Tax-Exempt B ond.

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

Series 2019G Bonds (Taxable)

The following discussion is generally limited to "U.S. owners," meaning beneficial owners of Series 2019G Bonds that for United States federal income tax purposes are individual citizens or residents of the United States, corporations or other entities taxable as corporations created or organized in or under the laws of the United States or any state thereof (including the District of Columbia), and certain estates or trusts with specific connections to the United States. Partnerships holding Series 2019G Bonds, and partners in such partnerships, should consult their own tax advisors regarding the tax consequences of an investment in the Series 2019G Bonds (including their status as U.S. owners).

Prospective purchasers of the Series 2019G Bonds upon their original issuance at prices other than the respective prices indicated on the pages immediately following the front cover of this Official Statement, and prospective purchasers of the Series 2019G Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Co-Bond Counsel express no opinion.

Payment of Interest

In general, interest paid or accrued on the Series 2019G Bonds will be treated as ordinary income to U.S. owners. A U.S. owner using the accrual method of accounting for U.S. federal income tax purposes must include interest paid or accrued on the Series 2019G Bonds in ordinary income as the interest accrues, while a U.S. owner using the cash receipts and disbursements method of accounting for U.S. federal income tax purposes must include interest in ordinary income when payments are received or constructively received by the owner.

Sale, Exchange, Retirement or Other Taxable Disposition of Series 2019G Bonds

Upon the sale, exchange, retirement or other taxable disposition of a Series 2019G B ond, a U.S. owner will recognize gain or loss equal to the difference between the amount realized from the sale, exchange, retirement or other disposition and the owner's adjusted basis in the Series 2019G B ond or applicable portion of the adjusted basis. The owner's adjusted basis generally will equal the cost of the Series 2019G B ond to the owner, reduced by any principal payments on the Series 2019G B ond previously received by the owner (including any other payments on the Series 2019G B ond that are not qualified stated interest payments). Any gain or loss recognized upon a sale, exchange, retirement or other disposition of a Series 2019G B ond (excluding amounts attributable to accrued interest) will generally be capital gain or loss and will be long-term capital gain or loss if the U.S. owner's holding period in the Series 2019G B ond exceeds one year. Long-term capital gains of individuals are currently eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Information Reporting and Backup Withholding

General information reporting requirements will apply to payments of principal and interest made on Series 2019G Bonds and the proceeds of the sale of Series 2019G Bonds to non-corporate holders of the Series 2019G Bonds, and "backup withholding," currently at a rate of 24%, will apply to such payments if the owner fails to provide an accurate taxpayer identification number in the manner required or fails to report all interest required to be

shown on its federal income tax returns. A beneficial owner of a Series 2019G B and that is a U.S. owner generally can obtain complete exemption from backup withholding by providing a properly completed IRS Form W-9 (Request for Taxpayer Identification Number and Certification).

Medicare Tax Affecting U.S. Owners

A U.S. owner that is an individual or estate, or a trust not included in a special class of trusts that is exempt from such tax, is subject to a 3.8% Medicare tax on the lesser of (1) the U.S. owner's "net investment income" for the taxable year and (2) the excess of the U.S. owner's modified adjusted gross income for the taxable year over a certain threshold (which in the case of individuals is between \$125,000 and \$250,000, depending on the individual's circumstances). A U.S. owner's net investment income generally includes interest income on, and net gains from the disposition of, Series 2019G B onds, unless such interest income or net gains are derived in the ordinary course of a trade or business (other than a trade or business that consists of certain passive or trading activities). A U.S. owner of Series 2019G B onds that is an individual, estate, or trust should consult its own tax advisor regarding the applicability of the Medicare tax.

Non-U.S. Owners

Under the Code, interest on Series 2019G B onds whose beneficial owner is not a U.S. owner is generally not subject to United States income tax or withholding tax (including backup withholding) if the non-U.S. owner provides the payor of interest on the Series 2019G B onds with an appropriate statement as to its status as a non-U.S. owner. This statement can be made on IRS Form W-8BEN or a successor form. If, however, the non-U.S. owner conducts a trade or business in the United States and the interest on the Series 2019G B onds held by the non-U.S. owner is effectively connected with such trade or business, that interest will be subject to United States income tax but will generally not be subject to United States withholding tax (including backup withholding).

The foregoing is a brief summary of certain federal income tax consequences to a non-U.S. owner. Non-U.S. owners should consult their own tax advisors regarding the tax consequences of an investment in the Series 2019G Bonds.

Foreign Account Tax Compliance Act

The Foreign Account Tax Compliance Act ("FATCA") generally imposes a 30% withholding tax on interest payments and proceeds from the sale of interest-bearing obligations for payments made after the relevant effective date to (i) certain foreign financial institutions that fail to certify their FATCA status and (ii) investment funds and non-financial foreign entities if certain disclosure requirements related to direct and indirect United States shareholders and/or United States accountholders are not satisfied.

Under applicable Treasury regulations, the FATCA withholding tax of 30% will generally be imposed, subject to certain exceptions, on payments of (i) interest on Series 2019G B onds and (ii) gross proceeds from the sale or other disposition of Series 2019G B onds on or after January 1, 2019, where such payments are made to persons described in the immediately preceding paragraph. In the case of payments made to a "foreign financial institution" (generally including an investment fund), as a beneficial owner or as an intermediary, the FATCA withholding tax generally will be imposed, subject to certain exceptions, unless such institution (i) enters into (or is otherwise subject to) and complies with an agreement with the U.S. government (a "FATCA Agreement") or (ii) is required by and complies with applicable foreign law enacted in connection with an intergovernmental agreement between the United States and a foreign jurisdiction (an "IGA"), in either case to, among other things, collect and provide to the U.S. or other relevant tax authorities certain information regarding U.S. account holders of such institution. In the case of payments made to a foreign entity that is not a financial institution (as a beneficial owner), the FATCA withholding tax generally will be imposed, subject to certain exceptions, unless such entity either provides the withholding agent with a certification that it does not have any "substantial" U.S. owner (generally, any specified U.S. person that directly or indirectly owns more than a specified percentage of such entity) or identifies its "substantial" U.S. owners.

If Series 2019G B onds are held through a foreign financial institution that enters into (or is otherwise subject to) a FATCA Agreement, such foreign financial institution (or, in certain cases, a person paying amounts to such

foreign financial institution) generally will be required, subject to certain exceptions, to withhold the 30% FATCA tax on payments of dividends or the items described above made to (i) a person (including an individual) that fails to comply with certain information requests or (ii) a foreign financial institution that has not entered into (and is not otherwise subject to) a FATCA Agreement and that is not required to comply with FATCA pursuant to applicable foreign law enacted in connection with an IGA. Coordinating rules may limit duplicative withholding in cases where the withholding described above in "-Non-U.S. Owners" or "-Information Reporting and Backup Withholding" also applies.

If any amount of, or in respect of, U.S. withholding tax were to be deducted or withheld from payments on Series 2019G B onds as a result of a failure by an investor (or by an institution through which an investor holds the Series 2019G B onds) to comply with FATCA, none of the Commission, any paying agent or any other person would, pursuant to the terms of the Series 2019G B onds, be required to pay additional amounts with respect to any Series 2019G B onds as a result of the deduction or withholding of such tax. Non-U.S. owners should consult their tax advisors regarding the application of FATCA to the ownership and disposition of Series 2019G B onds.

VERIFICATION OF MATHEMATICAL COMPUTATIONS

Upon delivery of the Series 2019E-H Bonds, the arithmetical accuracy of certain computations included in the schedules provided by the Co-Financial Advisors on behalf of the Commission relating to escrow sufficiency, will be verified by Robert Thomas CPA, LLC, independent certified public accountants (the "Verification Agent"). Such verification shall be based solely upon information and assumptions supplied to the Verification Agent by the Co-Financial Advisors. The Verification Agent has not made a study or evaluation of the information and assumptions on which such computations are based and, accordingly, has not expressed an opinion on the data used, the reasonableness of the assumptions or the achievability of the forecasted outcome.

APPROVAL OF LEGAL PROCEEDINGS

Certain legal matters incident to the authorization, issuance and sale of the Series 2019E-H B onds are subject to the approval of Squire Patton B oggs (US) LLP and Amira Jackmon, Attorney at Law, Co-B ond Counsel to the Commission. Certain legal matters will be passed upon for the Commission by the City Attorney and by Nixon Peabody LLP, Disclosure Counsel and for the Underwriters by Hawkins Delafield & Wood LLP, Underwriters' Counsel. Co-B ond Counsel expect to deliver separate opinions at the time of issuance of the Series 2019E-H B onds each substantially in the form set forth in Appendix G—"Proposed Form of Opinion of Co-B ond Counsel."

Co-B and Counsel are not passing upon and undertake no responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement.

PROFESSIONALS INVOLVED IN THE OFFERING

The Commission has retained Public Financial Management, Inc. and Backstrom McCarley Berry & Co., LLC, to serve as Co-Financial Advisors with respect to the issuance of the Series 2019E-H B onds.

The Co-Financial Advisors, Co-B and Counsel, Disclosure Counsel and Underwriters' Counsel will receive compensation with respect to the Series 2019E-H B ands which is contingent upon the sale and delivery of the Series 2019E-H B ands.

FINANCIAL STATEMENTS

The audited financial statements of the Commission for Fiscal Years 2017–18 and 2016–17 prepared in accordance with GASB guidelines, are included as APPENDIX B attached hereto. The financial statements referred to in the preceding sentence have been audited by KPMG LLP, independent certified accountants, whose report with respect thereto also appears in APPENDIX B. KPMG LLP, the Commission's independent auditor, has not been engaged to perform and has not performed, since the date of its report included herein, any procedures on the financial statements addressed in that report. KPMG LLP also has not performed any procedures relating to this Official Statement.

The 1991 Master Resolution requires the Commission to have its financial statements audited annually by independent certified public accountants with knowledge and experience in the field of governmental accounting and auditing, and it is the policy of the City to select the independent auditor periodically through a competitive selection process. KPMG LLP has been reappointed as independent auditor for a four-year term (subject to extension for up to three years at the option of the Commission) beginning with the Fiscal Year 2015–16 audit pursuant to a regular request for proposals process conducted by the City.

The 1991 Master Resolution provides that the audited financial statements prepared by the Commission each Fiscal Y ear are required to be provided to the Trustee within 120 days after the end of each such year. The Commission did not meet this deadline for certain years, including for Fiscal Y ear 2017–18. The Commission's audited financial statements for Fiscal Y ear 2017–18 were not completed until January 25, 2019 as a result of the City's transition to a new financial management software system and the implementation of GASB 75.

CONTINUING DISCLOSURE

The Commission will covenant for the benefit of the Holders and Beneficial Owners (as defined in the Continuing Disclosure Certificate) of the Series 2019E-H B onds to provide certain financial information and operating data relating to the Commission (the "Annual Disclosure Report") by not later than 270 days following the end of each Fiscal Year, and to provide notices of certain enumerated events. The Annual Disclosure Report and notices of these enumerated events will be filed by the Commission with the means of the Electronic Municipal Market Access site ("EMMA") maintained by the Municipal Securities Rulemaking B oard. The specific nature of the information to be contained in the Annual Disclosure Report or the notices of enumerated events is summarized in APPENDIX F- "SUMMARY OF CERTAIN PROVISIONS OF THE CONTINUING DISCLOSURE CERTIFICATE." These covenants have been made in order to assist the Underwriters of the Series 2019E-H B onds in complying with SEC Rule 15c2–12(b)(5).

The Commission believes that it has complied in all material respects with its undertakings to provide Annual Disclosure Reports and notices of enumerated events. However, the Commission has become aware of certain facts that it does not consider to be material but that are disclosed below for the benefit of the Holders and Beneficial Owners of its Bonds.

Some information that was made available in a timely manner on EMMA was not linked to all relevant CUSIP numbers. This includes the Commission's Annual Disclosure Report for the Fiscal Year ended June 30, 2012, for which a cover letter indicating that a previously filed remarketing memorandum contained the required financial and operating data was inadvertently omitted from the filing. Also some of the CUSIP numbers to which various other continuing disclosure filings related were not properly inputted. The Commission has taken action to link such information to the applicable CUSIP numbers, including filing the missing 2012 cover letter.

In addition, the Commission executed an enhanced master continuing disclosure certificate in 2011 in which it undertook to update additional tables in its Annual Disclosure Report. However, the Annual Disclosure Report for the Fiscal Y ear ended J une 30, 2011 did not include all or a portion of the information in three of these tables, although two of the tables were included in offering documents filed on EMMA prior to the filing of the Annual Disclosure Report and the third table was included in an offering document posted sooner than two months after the filing. Subsequent Annual Disclosure Reports included the additional data.

In addition, in 2011, an upgraded rating on the Bonds was disclosed in an offering document made available on EMMA but the upgrade itself was not disclosed in separate filings linked to all applicable CUSIP numbers. The upgrade was subsequently disclosed in the Annual Disclosure Report for the Fiscal Year ended June 30, 2011. AGM and National, the insurers of certain Commission bonds, received ratings upgrades in March 2014. The Commission did not make filings with respect to these ratings changes until May and June, 2014, respectively.

On October 12, 2017, Moody's raised its long-term jointly supported rating on the Commission's Second Series Variable Rate Revenue Refunding Bonds Issue 37C (Non-AMT/Private Activity). The Commission did not make the filing with respect to the rating change until January 4, 2018.

The Commission has enhanced its continuing disclosure filing procedures to help ensure that information that is filed on EMMA in the future contains all required information and is linked to the appropriate CUSIP numbers.

MISCELLANEOUS

This Official Statement has been duly authorized, executed and delivered by the Commission.

The summaries and descriptions of provisions of the 1991 Master Resolution, the Swap Agreements, the Continuing Disclosure Certificate, the Lease and Use Agreements, the purchase contract pursuant to which the Underwriters are purchasing the Series 2019E-H B onds, and the Reserve Account Credit Facilities and all references to other materials not purporting to be quoted in full are qualified in their entirety by reference to the complete provisions of the documents and other materials summarized or described. Copies of such documents may be obtained from the Trustee or, during the offering period, from the Underwriters. The Appendices are integral parts of this Official Statement and must be read together with all other parts of this Official Statement.

So far as any statements made in this Official Statement involve matters of opinion, forecasts or estimates, whether or not expressly stated, they are set forth as such and not as representations of fact.

AIRPORT COMMISSION OF THE CITY AND COUNTY OF SAN FRANCISCO

By: /s/Ivar C. Satero
Ivar C. Satero
Airport Director