MOODY'S
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New Issue

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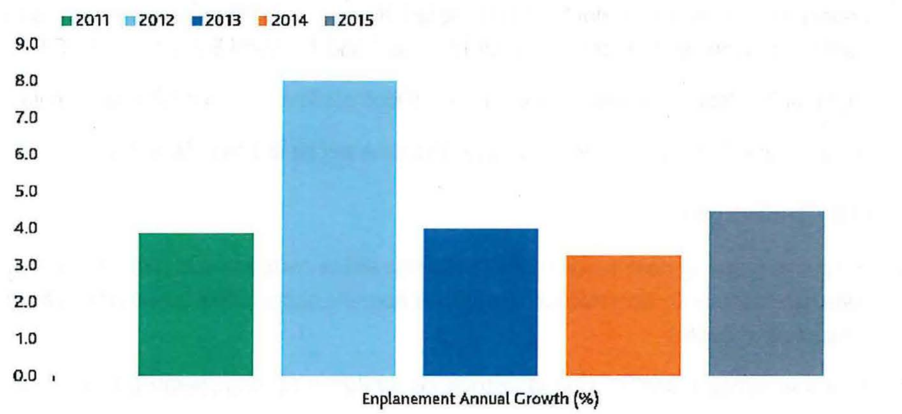
San Francisco Airport Commission, CA

New Issue: Moody's assigns A1 to San Francisco's (CA) 2016B, 2016C and 2016D airport revenue bonds with stable outlook

Summary Rating Rationale

Moody's Investors Service assigns an A1 to the San Francisco Airport's Commission 2016B, 2016C and 2016D Second Series Revenue and Refunding Bonds in the aggregate amount of $879.615 million and affirms the outstanding parity bonds at A1. The rating outlook is stable. Prior to the current issue airport's parity debt outstanding is $4.235 billion.

Exhibit 1
Enplanement Annual Growth



Source: Moody's Investors Service Municipal Financial Ratio Analysis Database

The A1 rating and the stable outlook are based on the airport's sustained and growing strong market position for air travel in the San Francisco Bay Area and track record of sound operational and financial management. The rating is supported by SFO's rapidly growing enplanements relative to other US airports due to strong economic growth in its service area; an increasingly diversified carrier base with continued service additions, stable debt service coverage ratios (DSCRs); rapidly amortizing debt; a strong liquidity position and reduced variable rate exposure. Offsetting these strengths are already high and increasing debt levels as the airport implements a $5.7 billion largely debt-financed 5-year capital improvement program (CIP) through 2021 (up from prior five year plan of $2.8 billion and 10 year plan of $4.5 billion) that is estimated to raise airline costs to approximately $24.40 CPE and approximately $343 debt per enplanement and $416.50 per O&D enplanement by FY 2022. The 10 year CIP is now $6.1 billion. Credit strengths are the airport's 79% origination and destination (O&D) traffic derived from a very strong service area economy that continues to grow and require air service, as well as demonstrated ability to manage and deliver complex capital programs ahead of schedule and within budget using a design-build methodology.

Key to maintaining the stable outlook is the airport's plan to absorb and support the expected additional $5.1 billion of additional debt through 2022 as $1.3 billion of outstanding debt is amortized. We note, however, that the CIP is designed to be modular and the airport has previously identified several projects that could be deferred or scaled back, thus allowing the airport to trim $1 billion debt, if forecasted traffic and revenue and cost targets are not achieved.

Credit Strengths

» Large, affluent, diverse and growing service area economy and status as a premier domestic and international tourist destination provides strong demand for O&D traffic

» Strong enplanement growth has been resilient due to growth of operations by United, some new carriers and six low cost carriers (LCCs), accounting for approximately 24% of domestic enplanements. LCC service has increased domestic competition, which reinforces the airports strength compared to other Bay Area airports because of its international connectivity advantage

» Ten-year use and lease airline agreement through 2021 maintains residual rate-making and provides for increased gate utilization and common use gates, but also allows airlines to downsize leased space

» Concession revenues have doubled over the last 10 years as facilities have been upgraded and expanded and are forecasted to continue to grow with modernization of Terminal 1 and Termiinal 3 as part of the CIP

» Outstanding debt amortizes quickly with $1.1 billion paid by 2021 and $2.3 billion paid by 2026

» Variable rate debt has decreased and after this issue will be less than 10% of total debt outstanding after the current issuance

Credit Challenges

» Very large primarily debt-funded CIP will increase airline costs and add construction risk as well as operating risk due to relatively constrained space for construction, though we note the airport has a proven track record of delivering large complex projects on schedule and budget

» Revenues remain reliant on United, accounting for 20.9% of total operating revenues and 45% of enplanements in FY 2015

» Debt levels and cost structure are above Moody's US airport medians and are projected to rise even higher, though will be consistent with international gateway airports. Increased CPE due to the planned CIP debt could reduce SFOs competitiveness relative to other service area airports, but given its status as an international gateway we expect SFO will remain competitive

» Competition from other Bay Area airports and capacity constraints at SFO may limit future passenger growth, though SFO has retained and slightly increased its market share and is well positioned to capture the majority of international passenger growth in the service area due to its terminal and FIS facilities. SFO has a 94% share of international passengers relative to Oakland and San Jose

» Some exposure to an economic slowdown in Asia, with roughly half of the international passengers (international passengers account for 22% of the airport total) arriving on Trans-Pacific routes, though growth in European markets has accelerated

» The current airline agreement expires in 2021, just as airline costs will peak due to the added debt for the CIP

Rating Outlook

The stable rating outlook reflects our expectation that enplanements will continue to steadily increase at or above the previously forecast rate of 2.2% average annual growth through 2022; financial margins and liquidity will remain healthy and the airport will manage costs and maintain financial liquidity as it implements a largely debt financed $5.7 billion 5 year CIP. The stable outlook is also based on maintaining competitive costs in line with those of international hub airports and retaining service area market share due to SFOs regional connectivity advantage as an international gateway. As we noted in our 1/19/16 report, sustained debt per O&D enplanements significantly above $300 would place downward pressure on the rating as would DSCRs below 1.3 times on a bond ordinance basis and 1.1 times excluding allowed contingency fund transfers.

Factors that Could Lead to an Upgrade

» Significantly higher than forecasted growth in passengers and increased revenue and liquidity could have a positive credit impact, though an upgrade is unlikely during the period that the new debt-financed CIP is being financed and implemented.

» Continued service additions by carriers that diversify the airports revenue base and reduce its reliance on United Airlines for passenger traffic also could have a positive credit impact.

Factors that Could Lead to a Downgrade

» Slower than forecasted traffic and revenue growth or increased or accelerated debt issuance that reduces the airports competitiveness relative to other airports would exert downward rating pressure, as would downsizing of operations by United.

» Debt per O&D enplanement above currently projected levels of $330.30 per total passenger and $416.50 per O&D passenger would place downward pressure on the rating as would DSCRs below 1.3 times on a bond ordinance basis and 1.1 times excluding allowed contingency fund transfers.

Key Indicators

Exhibit 2
Key Indicators

	2011	2012	2013	2014	2015
Enplanement Annual Growth (%)	3.9	8.0	4.0	3.2	4.5
Debt Outstanding ($'000)	4,215,230	4,062,265	3,906,395	4,204,425	4,496,390
Debt to Operating Revenues (x)	6.2	5.4	5.1	5.2	5.3
Debt Per O&D Enplaned Passenger ($)	254	224	204	212	230
Days Cash on Hand ('000)	230	230	230	230	230
Senior Lien Coverage By Net Revenues (x)	1.18	1.16	1.13	1.04	1.15
Total Coverage By Net Revenues (x)	1.18	1.16	1.13	1.04	1.15

Source: Moody's Investors Service Municipal Financial Ratio Analysis Database

Recent Developments/Detailed Rating Considerations

The airport's CIP has been significantly expanded and totals $5.7 billion over five years with $5.1 billion expected to be bond-funded. Over half of the CIP is for terminal improvements, and includes the addition of six gates at Terminal 1 (T1) to alleviate capacity constraints at that terminal, as well as added scope for Terminal 3 seismic stability improvements and gate enhancements and a secure passenger connector between Terminals 2 and 3 (T2 and T3). Additional projects included expansion of parking facilities, improvements to groundside access and extension of the Airtrain. Some of the CIP projects had been included in the airport's prior CIP, but they are now being accelerated in response to increased airline and passenger demand. While there is some modularity in the CIP and the ability to cut $1 billion in debt financing by 'off-ramping' deferring, under the base case debt will increase the airport's CPE to $24.40 and debt per to approximately $416.50 by 2022 from $16.53 and $206.80, respectively in FY 2016. In a stress scenario where the airport loses 10% of total enplanenments in 2018, the CPE would rise to $28.21.

Fiscal year 2016 enplanements grew 6.7% following 4.5% growth in FY 2015. Calender year-to-date enplanements through July are up 5.9% compared to 2015 with international up 8.7% and domestic up 6.2%. Enplanement growth has exceeded forecasts over the last few years, with current enplanement levels not predicted to be reached until 2021 according to the 2013 forecast.

The traffic and revenue forecast assumes 2.2% average annual growth (AAG) in enplanements through 2022, which we think is relatively conservative given the 4.2% AAG achieved from 2005 to 2015. San Francisco's regional market share relative to San Jose (SJO A2, stable) and Oakland (OAK A2, stable) increased to 70% in 2015 from 57% in 2007 and is now holding steady.

Revenue Generating Base

The San Francisco service area continues to be one of the strongest in the US with strong growth in almost every sector with tech leading the way. Professional services, a highly important sector to expanding economies, continues to show strong improvement well above in US average as well as the biotech and finance industries. All of these industries are creating strong job growth that will spill over into housing demand as well as demand for local goods and services.

The airport's service economy is diversified and SFO is important gateway to the Pacific Rim. According to the April 2016 Moody's Economy.com report, the San Francisco area economy is expanding. The unemployment rate has dropped to 3.6%, and the labor force participation rate is now 10 percentage points above the national average. The tech sector is driving much of the job creation and wage growth, though mid-wage jobs are also outperforming. The metro division was the first major California regional economy to regain all the jobs lost since the recession. Housing is poised to grow in the near term, due to the housing shortage, with single-family housing prices 39% above their 2007 peak. The area's growth could be slowed, however, if business and living costs rise too quickly in the short term. Overall, the metro division is expected to outperform the US over most of the forecast horizon in output and employment gains.

Operational and Financial Performance

Fiscal year 2015 operating revenues increased 9.3% and expenditures increased 2.7%. Concession, parking and ground transportation revenues went up 6% and 7.2%, respectively, and aviation revenues 5.3% due to higher rental rates and landing fees under the residual rate-making methodology. The FY 2015 total airport average CPE of $16.00 is up slightly from $15.78 FY 2014 and CPE is expected to increase to $16.53 in FY 2016. While above Moody's medians for A1 rated airports ($11.05) it is consistent with costs for international gateway airports and we note that SFO's estimated overall CPE for domestic airlines is $11.96 versus in the low $30s for international airlines. By comparison, OAK is at $10.48 and SJO at $9.60, but these are both primarily domestic markets.

LIQUIDITY

Liquidity levels have been steady and improved in FY 2015 due to surpluses from strong growth in concession revenues from new concessions in the international terminal and renovated portions of T3, and moderate growth in expenditures. Days cash on hand was 381 excluding unrestricted PFC fund balances which may be applied to eligible project and debt service. Including these balances DCOH was 513 per Moody's calculation, which compares to median DCOH for all airports of 560 and 583 for A1 rated airports.

Debt and Other Liabilities

DEBT STRUCTURE

Outstanding debt amortizes quickly with $1.1 billion repaid by 2021 and $2.3 billion by 2026, opening capacity for the $5.1 billion in additional CIP debt to be issued by 2021. Variable rate debt has decreased and after the current issuance will represent less than 10% of total debt outstanding with derivative exposure to $478.9 million on the outstanding variable rate bonds.

The airport spent $585 million on capital projects in FY 2016, primarily for T1 improvements as well as airside, safety and transportation system improvements.

DEBT-RELATED DERIVATIVES

SFO's strong internal liquidity and CP program backed by letters of credit (LOC) provides a significant offset to the additional financial risks such as basis risk, amortization mismatch, and market access risk associated with the airport's $479.5 million swap portfolio. The portfolio had a current market value of $98.8 million in favor of the counterparties as of June 30, 2016.

PENSIONS AND OPEB

The financial impact of unfunded pension and OPEB obligations of this issuer are minor and thus not currently a major factor in our assessment of its credit profile.

Management and Governance

SFO is owned and policed by the City and County of San Francisco. The airport commission is responsible for the operation and management of the Airport, which is an enterprise department of the city. Under the city charter, the commission is responsible for the operation and management of the airport. 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 Board of Supervisors but only for official misconduct.

Senior management is led by the airport 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.

Legal Security

The bonds are secured by net airport revenues on parity with all outstanding second series senior lien obligations. Commercial Paper is subordinate to senior bonds. The Series 2016 B,C,D bonds will be secured by the pooled Original Reserve Account which is required to be funded at maximum annual debt service (MADs). The debt service reserve fund will be fully cash-funded at indenture required levels with the current issue.

Use of Proceeds

The $581.775 million Series 2016B and $168.64 million 2016C bonds will repay $343 million in outstanding commercial paper and provide funding for the airport's CIP projects. The $129.2 million Series 2016D bond will refund approximately $138.08 million outstanding Series bonds for estimated net present value savings of approximately $12.46 million or 8.6% of refunded bonds.

Obligor Profile

San Francisco International Airport is an international airport located 13 miles south of downtown San Francisco, California. It has flights to points throughout North America and is a major gateway to Europe and Asia. It has non-stop service to 122 domestic and 44 international destinations.

SFO is the largest airport in the Bay Area and the second busiest in California, after Los Angeles International Airport. In 2015, it was ranked the seventh busiest and the third largest O&D airport in the US. It is United Airlines' fifth largest hub and primary transpacific gateway. United accounts for 44% of passengers in 2016 compared to 52% in 2007 and the airline has its sole maintenance hub at SFO. The airport is also served by five low cost carriers (LCCs), two regional and 36 foreign flag carriers. Notably added 11 new destinations or service offerings in CY 2016.

Other Considerations: Mapping to the Grid

The grid is a reference tool that can be used to approximate credit profiles in the airport sector in most cases. However, the grid is a summary that does not include every rating consideration. Please see our Publicly Managed Airports Rating Methodology for information about the limitations inherent to grids.

The grid indicated rating is the same as the published rating.

Exhibit 3

Publicly Managed Airports Methodology Scorecard Factors

Factor	Subfactor	Score	Metric
1. Market Position	a) Size of Service Area (millions)	6.1	Aaa
	b) Economic Strength and Diversity of Service Area		Aaa
	c) Competition for Travel		A
2. Service Offering	a) Total Enplanements (millions)	24	Aaa
	b) Stability of Traffic Performance		Aaa
	c) Stability of Costs		Ba
	d) Carrier base (Primary Carrier as % of Total Enplanements)	45.20%	Baa
3. Leverage and Coverage	a)Debt Service Coverage by Net Revenues	1.15	A
	b)Debt in USD per O&D Enplaned Passenger	230.08	A

Notching Considerations		Notch
4. Liquidity	Days Cash on Hand	
5. Connecting Traffic	O&D Traffic	
6. Potential for Increased Leverage		-0.5
7. Debt Service Reserves		
Scorecard Indicated Rating		A1

Source: Moody's Investors Service

Methodology

The principal methodology used in this rating was Publicly Managed Airports and Related Issuers published in November 2015. Please see the Ratings Methodologies page on www.moodys.com for a copy of this methodology.

Ratings

Exhibit 4

SAN FRANCISCO AIRPORT COMMISSION, CA

Issue	Rating
San Francisco International Airport Second Series Revenue and Refunding Bonds, Series 2016 B (AMT)	A1
Rating Type	Underlying LT
Sale Amount	$581,775,000
Expected Sale Date	09/15/2016
Rating Description	Revenue: Government Enterprise
San Francisco International Airport Second Series Revenue and Refunding Bonds, Series 2016 C (Non-AMT/Governmental Purpose)	A1
Rating Type	Underlying LT
Sale Amount	$168,640,000
Expected Sale Date	09/15/2016
Rating Description	Revenue: Government Enterprise
San Francisco International Airport Second Series Revenue and Refunding Bonds, Series 2016D	A1
Rating Type	Underlying LT
Sale Amount	$129,200,000
Expected Sale Date	09/15/2016
Rating Description	Revenue: Government Enterprise

Source: Moody's Investors Service

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