

CREDIT OPINION

6 January 2016

New Issue

Contacts

Christian Ward 415-274-1721
 Analyst
christian.ward@moodys.com

Alexandra J. 415-274-1754
 Cimmiyotti
 VP-Senior Analyst
alexandra.cimmiyotti@moodys.com

San Francisco (City and County of), CA

New Issue - Moody's assigns Aa1 to San Francisco, CA's GO Bonds, Ser. 2016A&B

Summary Rating Rationale

Moody's Investors Service has assigned an Aa1 rating to the City and County of San Francisco, CA's General Obligation Bonds (Clean and Safe Neighborhood Parks Bond, 2008), Series 2016A totaling approximately \$8.7 million and the General Obligation Bonds (Clean and Safe Neighborhood Parks Bonds, 2012), Series 2016B totaling approximately \$43.4 million. We have also affirmed the Aa1 rating on the City and County's outstanding general obligation bonds totaling approximately \$2.0 billion and the Aa3 rating on the city's outstanding lease revenue bonds and certificates of participation totaling approximately \$1.1 billion. Additionally, we have affirmed the A1 rating on the City and County's Lease Revenue Bonds, which are part of the equipment program.

The Aa1 rating reflects the strength of the City and County's (city's) tax base, which remains strong and stable. We expect continued modest growth in the city's tax base in the near-term, largely fueled by continued growth in the technology sector, which has promoted growth in the city's other economic sectors as well. Even in the likely event that the city's tech sector growth were to cool, the city's large tax base would still support the current rating assignment. The city's credit profile also benefits from an above-average socioeconomic profile of area residents and strong economic metrics in median home value and a low unemployment rate. The financial profile of the city has greatly benefited from the recent economic expansion and is currently at its strongest position than at any time in the past decade. Long-term projections reflect expenditures increasing faster than revenues, which will likely limit the city's reserve growth, but established financial policies should help to keep the city's reserves stable. The city has a typical debt profile with a substantial portion of its outstanding debt in unlimited ad valorem property tax general obligation bonds, but the city maintains a somewhat elevated combined pension, OPEB, and lease burden.

The general obligation rating reflects the strength of the voter-approved, unlimited property tax pledge securing the bonds and the well-established levy and collection history for the debt service payment. In this instance, the city levies, collects, and disburses the property taxes constitutionally restricted for debt service on general obligation bonds directly to the paying agent.

The Aa3 lease supported obligations are secured by standard, California abatement leases. The two notch distinction between the general obligation ratings represents the weaker security pledge for lease-backed obligations and the additional risk to creditors from the

city's financial, operational, and economic conditions compared to the more secure general obligation pledge.

The A1 equipment lease revenue bonds are secured by a typical abatement lease between the city and its finance corporation. The three notch distinction between the general obligation ratings represents the weaker security pledge for these leased assets, which include a wide range of equipment and vehicles for various city departments, principally Police, Fire, Public Works, and Recreation & Parks. The city has pledged to budget and appropriate lease payments for these bonds as long as it has use and possession of the leased assets.

Credit Strengths

- » Large, diverse, and growing tax base that will remain strong even in the face of an economic cooling
- » Above-average resident economic profile

Credit Challenges

- » Long-term projections reflect expenditures growing faster than revenues
- » Somewhat elevated combined pension, OPEB, and lease burden expenditures
- » Recent growth fueled by the technology sector, which is historically a volatile economic sector

Rating Outlook

The outlook on the city's long-term ratings is stable. The outlook recognizes the city's large and diverse tax base, which is fundamentally sound, and the city's financial position, which should remain stable given the financial policies implemented by city management.

Factors that Could Lead to an Upgrade

- » Significantly improved and/or sustained financial profile at currently strong levels
- » Sustained economic strengthening

Factors that Could Lead to a Downgrade

- » Deterioration of the city's fiscal position
- » Unanticipated and material weakening of the city's economy for a prolonged period of time

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Key Indicators

San Francisco (City and County of) CA	2011	2012	2013	2014	2015
Economy/Tax Base					
Total Full Value (\$000)	\$ 166,414,083	\$ 158,649,887	\$ 165,043,120	\$ 172,489,208	\$ 181,809,981
Full Value Per Capita	\$ 208,543	\$ 196,408	N/A	\$ 210,996	\$ 210,326
Median Family Income (% of US Median)	135.8%	137.1%	139.2%		
Finances					
Operating Revenue (\$000)	\$ 3,150,565	\$ 3,366,251	\$ 3,537,941	\$ 3,984,387	\$ 4,366,817
Fund Balance as a % of Revenues	11.0%	14.3%	17.6%	21.5%	25.8%
Cash Balance as a % of Revenues	15.1%	18.6%	24.6%	30.0%	32.8%
Debt/Pensions					
Net Direct Debt (\$000)	\$ 2,352,329	\$ 2,334,044	\$ 2,713,049	\$ 2,703,945	\$ 2,583,175
Net Direct Debt / Operating Revenues (x)	0.7x	0.7x	0.8x	0.7x	0.6x
Net Direct Debt / Full Value (%)	1.4%	1.5%	1.6%	1.6%	1.4%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	1.7x	1.7x	1.9x	0.0x	1.4x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	3.2%	3.6%	4.1%	0.0%	0.0%

Source: Moody's Investors Service

Detailed Rating Considerations

Economy and Tax Base: Exceptionally Large Economy Continues to Improve

San Francisco's economy continues to exhibit notable strength and size compared to other large U.S. cities and we expect continued growth. The local economy is one of the strongest in the nation. The city's exceptionally low unemployment rate of 3.4% as of October 2015 is indicative of a labor market at full employment. The technology sector continues to fuel the local economy and provide plentiful job opportunities in both tech and other economic sectors, which is increasing the city's population growth, which is near a 45-year high. Technology will continue to drive strong wage growth, even as job gains cool and approach the national rate over the next couple of years. Now that the area has reached full employment, employees are more difficult to find and expensive to hire. Moving forward, the demand for talent, coupled with the fast-rising cost profile of the city, will likely cool the rate of economic growth in the next few years. Even with possible economic cooling, the city's local economy will continue to exhibit notable strength and support the city's high credit quality.

The city's assessed value (AV) increased by 6.9% in fiscal 2016 to \$194.4 billion, which is more than double the median for Aa1-rated cities with populations greater than 500,000. Growth has largely been driven by the strength of local housing and commercial prices, which are not showing signs of slowing down and will likely continue to increase. The median home value for the city was 421.4% of the US average as of 2013 estimates. Single-family housing prices are 35% above their 2007 peak, and rents are rising by 7%-13% per year. Homebuilding will likely set another record year in 2016.

The city's tax base is also highly diverse with the ten largest taxpayers representing only 2.6% of the city's total 2016 AV. The median family income for the city was 139.2% of the US average as of 2013 estimates, while per capita income was 172.2% of the US average. These figures have improved since the last census review in 2000.

Financial Operations and Reserves: Improving Financial Profile; Long-term Expenditures Outpace Revenues

The city's economic strength has resulted in a currently strong financial position, which we expect will remain strong for the next few years with the city's continued economic strength. In the long-term, the city projects expenditures increasing faster than revenues, which will likely limit the upward growth of the city's ending reserve levels. The city maintains strong financial policies, however, and has several financial tools available to curb expenditures in the event of an economic downturn. Additionally, the city consistently plans for the long-term with its five-year financial plan, five-year information and communication technology plan, and ten-year capital plan. Management has proven that expenditure adjustments will be made annually to these long-term plans to adjust for any unanticipated economic or financial changes. These policies and practices should help to keep the city's financial profile stable in the long-term and appropriate for the rating category.

The city's economically sensitive revenues, such as property, hotel, sales, and business taxes, will continue to grow for the next few years along with the strong economy. The above-mentioned tax revenues all increased in fiscal 2015 from the previous year and are showing signs of continued growth in fiscal 2016. Current projections show revenues increasing by \$75.6 million in fiscal 2017 and increasing by \$152.5 million in fiscal 2018. Revenue growth for the city should remain strong in the near-term, but expenditure growth still outpaces strong revenues. Major drivers for the city's expenditure growth projections are an unexpected increase in employer retirement contributions to the employee pension and voter-approved propositions and set-asides.

Fiscal 2015 was the city's strongest financial year in recent history. Available operating general fund reserves (unassigned, assigned, committed, and restricted debt service reserves) increased to \$1.1 billion (25.8% of revenues). Outside of this balance is an additional \$115.0 million in the city's Rainy Day Reserve, which balance should continue to increase in the near-term. Operating revenues will continue to increase in fiscal 2016 given the strong growth trends of the city and will likely continue through fiscal 2020.

To minimize expenditures in the next few fiscal years, management has given budget instructions to each department to reduce ongoing expenditures by 1.5% of adjusted general fund support in fiscal 2017 and by an additional 1.5% in fiscal 2018. These policies should help to slow the pace of expenditure growth in the out years.

LIQUIDITY

The city's general fund liquidity continues to be exceptionally strong. The ending general fund cash balance for fiscal 2015 was \$1.4 billion (32.8% of revenues) and city liquidity will likely remain exceptionally strong for the projection period.

Debt and Pensions: Manageable Debt Levels with Small Variable Rate Debt Exposure; Slightly Elevated Combined Pension, OPEB, and Lease Burden

The city has an average 1.4% of AV net direct debt burden as of fiscal 2015 that should remain stable as AV growth offsets anticipated general obligation bond issuances. In the long-term, we anticipate the city's direct debt burden will remain low given a city charter provision that prohibits bond indebtedness greater than 3.0% of AV. The city has a low fiscal 2015 general fund lease burden of 1.4% of general fund operating revenues, which will likely increase to 2.6% of revenues at maximum annual debt service in fiscal 2017. The city has pension costs that equaled 13.4% of operating general fund revenues in fiscal 2015 and OPEB contributions that equaled 8.3% of operating general fund revenues in the same year. The combined general fund-supported debt, together with the city's pension and OPEB costs, bring the total general fund fixed-obligations to a material, but still manageable, 23.1% of fiscal 2015 general fund operating revenues. These obligations are slightly elevated compared to other cities nationwide, but not overly burdensome given the strength of San Francisco's general fund revenues.

DEBT STRUCTURE

We feel the city's exposure to variable rate debt is minimal and manageable given the size of the city's general fund cash position. Outstanding variable rate debt, including the Series 2008-1 and 2008-2 revenue bonds and the city's commercial paper program, was only 11% of the city's total debt portfolio as of the 2015 audit. The variable rate debt outstanding represents 21% of the city's available general fund cash for the same fiscal year, suggesting that the general fund could effectively absorb any unanticipated costs associated with its variable rate debt.

The commercial paper program is supported by three letters of credit: JP Morgan Chase and US Bank provide two letters of credit (LOCs) that both expire on June 10, 2016 and State Street Bank and Trust provides a third LOC that expires on February 26, 2019. The city is in the process of renewing the JP Morgan Chase and US Bank LOCs before expiration in June 2016.

The city also has two LOCs for its Series 2008-1 and 2008-2 revenue bonds. On October 8, 2014, State Street Bank provided LOCs for a five-year term for the Series 2008-1, replacing Bank of America after a mandatory tender. State Street extended the existing LOC for Series 2008-2 (no mandatory tender). The current par outstanding for each series is \$52.5 million. The city optionally redeemed \$3.0 million from each series in October 2014.

DEBT-RELATED DERIVATIVES

The city has no debt-related derivatives. One interest rate swap is associated with the San Francisco International Airport and the risk of this swap is incorporated in the analysis of the airport ratings.

PENSIONS AND OPEB

Moody's adjusted net pension liability (ANPL) for the city, under our methodology for adjusting reported pension data, is \$6.7 billion, or a moderate 1.4 times three-year average operating revenues using fiscal 2013 reporting. Moody's ANPL reflects certain adjustments we make to improve comparability of reported pension liabilities. The adjustments are not intended to replace the district's reported liability information, but to improve comparability with other rated entities. The city's large pension liability will continue to be a long-term challenge and budgetary pressure point, but should not affect the city's rating in the near-term given the strength of the local economy and its positive effect on the city's financial profile.

The city's unfunded OPEB liability remains large at \$4.0 billion, which was 161.9% of the city's covered payroll as of July 1, 2012. Changes to the city's OPEB plan should result in significantly lower costs by fiscal 2035, but OPEB costs will continue to remain a near-term budgetary challenge.

Management and Governance

The city will continue to benefit from its strong, professional management team and management's ability to carefully make skillful economic and financial projections. Management also maintains a healthy degree of flexibility to adjust expenditures in the face of changes to economic and financial projections.

California cities have an institutional framework score of "A," or moderate. Revenue predictability is moderate, because the primary sources are property taxes and sales taxes. Property taxes are very predictable, given the state's constitutional formula, known as Proposition 13, while sales taxes are economically sensitive. Revenue-raising ability is moderate because increases almost always require voter approval. Expenditure reduction ability is moderate, because of collective bargaining and growing pension and OPEB pressures. Expenditure predictability is high, as police and fire typically make up 60% of discretionary spending in full-service cities.

Legal Security

The legal security for the current issuance is an unlimited property tax level on all property subject to taxation within the boundaries of the city.

Use of Proceeds

Proceeds from the current issuance will be used to finance the construction and modernization of the city's parks and recreational facilities authorized by voters under an election held in 2008 and an election held in 2012.

Obligor Profile

The city is the economic and cultural center of the San Francisco Bay Area and northern California. The limits of the city encompass over 93 square miles, of which 49 square miles are land, with the balance consisting of tidelands and a portion of the San Francisco Bay. Silicon Valley is about a 40-minute drive to the south, and the wine country is about an hour's drive to the north. The city's fiscal 2015 population was approximately 864,400.

Methodology

The principal methodology used in this rating was US Local Government General Obligation Debt published in January 2014. The additional methodology used in the lease-backed rating was The Fundamentals of Credit Analysis for Lease-Backed Municipal Obligations published in December 2011. Please see the Credit Policy page on www.moody.com for a copy of these methodologies.

Ratings

Exhibit 2

SAN FRANCISCO (CITY & COUNTY OF) CA

Issue	Rating
General Obligation Bonds (Clean and Safe Neighborhood Parks Bonds, 2008), Series 2016A	Aa1
Rating Type	Underlying LT
Sale Amount	\$8,695,000
Expected Sale Date	01/20/2016
Rating Description	General Obligation

General Obligation Bonds (Clean and Safe Neighborhood Parks Bonds, 2012), Series 2016B		Aa1
Rating Type	Underlying LT	
Sale Amount	\$43,415,000	
Expected Sale Date	01/20/2016	
Rating Description	General Obligation	

Source: Moody's Investors Service

© 2016 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1012115

Analyst Contacts

Christian Ward
Analyst
christian.ward@moodys.com

415-274-1721

Alexandra J. Cimmiyotti
VP-Senior Analyst
alexandra.cimmiyotti@moodys.com

415-274-1754

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454