

The California Municipal Borrowers Guide



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This overview provides information about the major municipal borrowers in the State of California and their bond programs. The borrowers described in this guide include some of the most established and recognized issuers in the municipal market, as well as issuers of bonds under programs that have been established more recently. They reflect the largest and most active issuers in the state, and encompass various types of debt. In many cases, a single borrower may issue debt under multiple programs that are each repaid with a different revenue source; all significant active bonds programs are covered for these borrowers. Individual series or maturities within each of the bond programs may be insured.

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Introduction

This introduction is intended to provide an overview of the long-term economic and fiscal developments taking place in the State of California. Several factors are weighed and counterbalanced when determining these long-term trends. In terms of the economy, unemployment, job creation, and industry diversity are considered. Trends in the tax base are examined by looking at per capita income, tax burden, and shifts in adjusted gross income into and out of the state. Finally, trends in the state's fiscal position is presented in terms of liabilities and reserves.

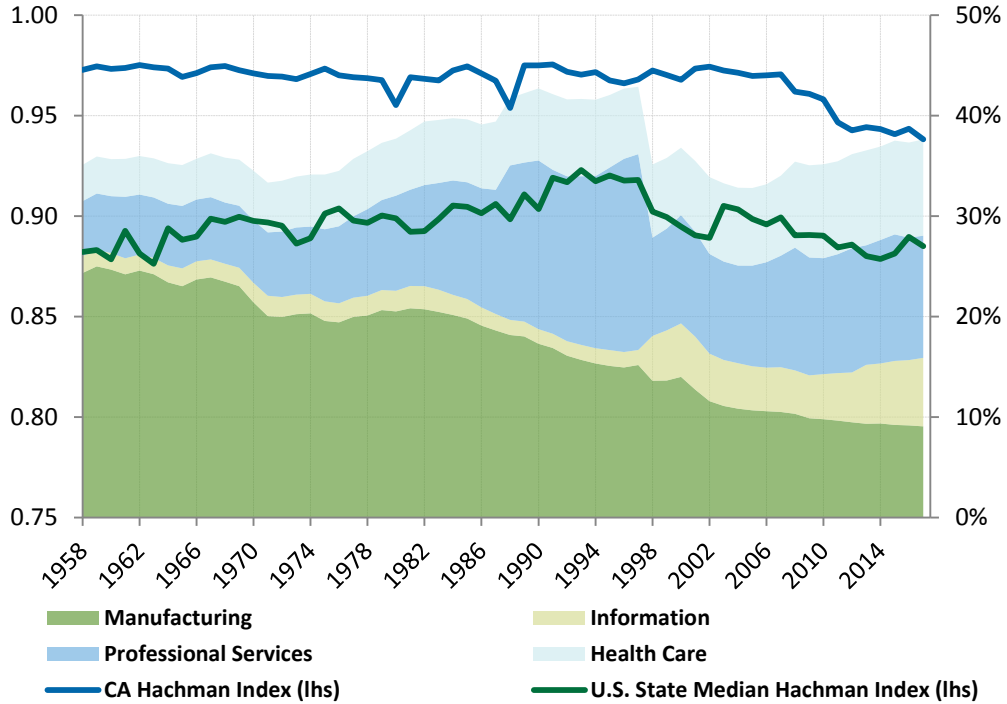
Of the 50 state economies, California ranks 6th largest as measured by per capita personal income from all industries. Not only is California's economy large, it is highly diversified as well, although economic diversity has declined slightly since peaking in 1991. The measure of the state's overall economic diversity may be derived using the Hachman Index. This is an index of similarity that measures how closely industry earnings of the subject region (California) resembles that of the reference region (United States). The value of the index is between zero and one. As the value of the index approaches one, this means that the subject region's employment distribution among industries is more similar to that of the reference region. If the reference region is the nation, and, given the assumption that the nation's economy is diversified, a larger value of the Hachman Index relative to the nation means that a subject region is more diversified (and therefore less specialized). In 2017, California had a Hachman Index value of 0.94, indicating that its economy closely resembled that of the nation, and was more diversified compared to the median state, which was described by an index value of 0.89. In fact, in terms of the Hachman Index, California's economy has been more diversified than the U.S. state median since the 1950s. Along with the nation, the state has experienced a decline in the share of income earned from the manufacturing sector since the 1950s. While the state has retained a sizable manufacturing industry, more generally, service industries have displaced manufacturing as the drivers of personal income growth. In addition to manufacturing, health care, professional services, and the information sectors were the largest private sector industries in terms of personal income in California in 2017.

While California's industry mixture provides some stability to the economy, this stability is not paralleled in state revenues due to a highly progressive income tax structure and a reliance on capital gains, which are taxed as ordinary income. Because a small portion of tax payers are responsible for a large share of the income taxes, California exhibits more revenue volatility relative to other states. Volatility in the state's personal income tax receipts is closely tied to the performance of the capital markets, and is evidenced by a correlation coefficient of 0.94 with the Standard and Poor's 500 Index since 1993.

The charts on the following page illustrate the trends in California's economic diversity (Hachman Index), its four largest private sector industries in terms of personal income as of 2017, and in the state's personal income tax revenue.

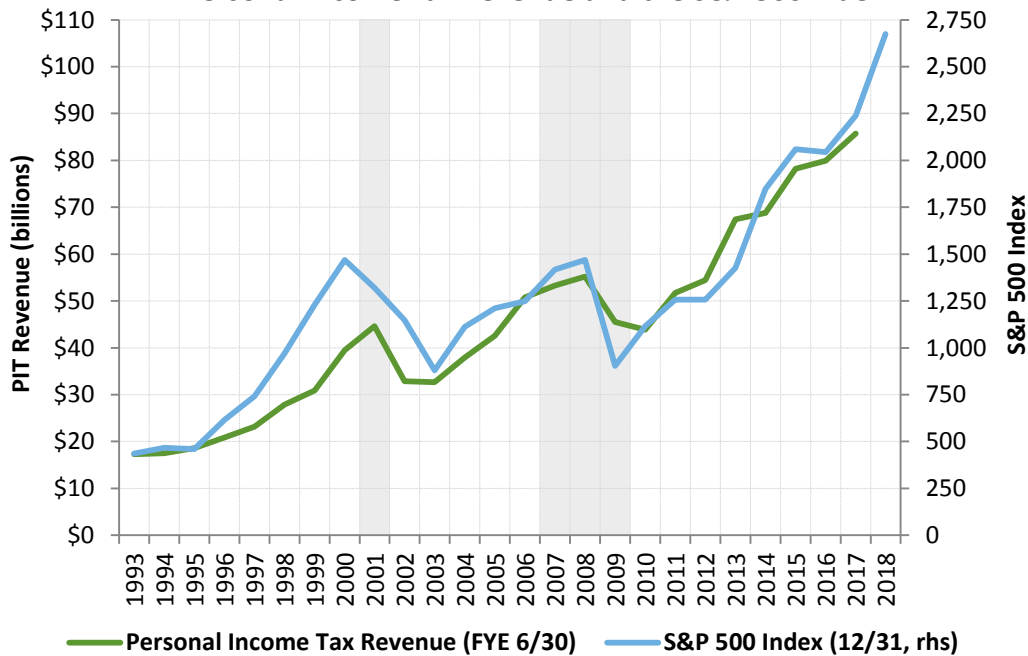
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State of California Economic Diversity and % of Personal Income Derived from Top 4 Private Sector Industries



Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Fidelity Capital Markets; July 17, 2018

**State of California
Personal Income Tax Revenue and the S&P 500 Index**



Source: California CAFRs, Bloomberg, Fidelity Capital Markets; July 17, 2018

Note: PIT revenue for fiscal years ending 6/30 is aligned with S&P 500 Index level 6 months earlier (12/31). Gray bars denote years in which recession occurred.



Introduction

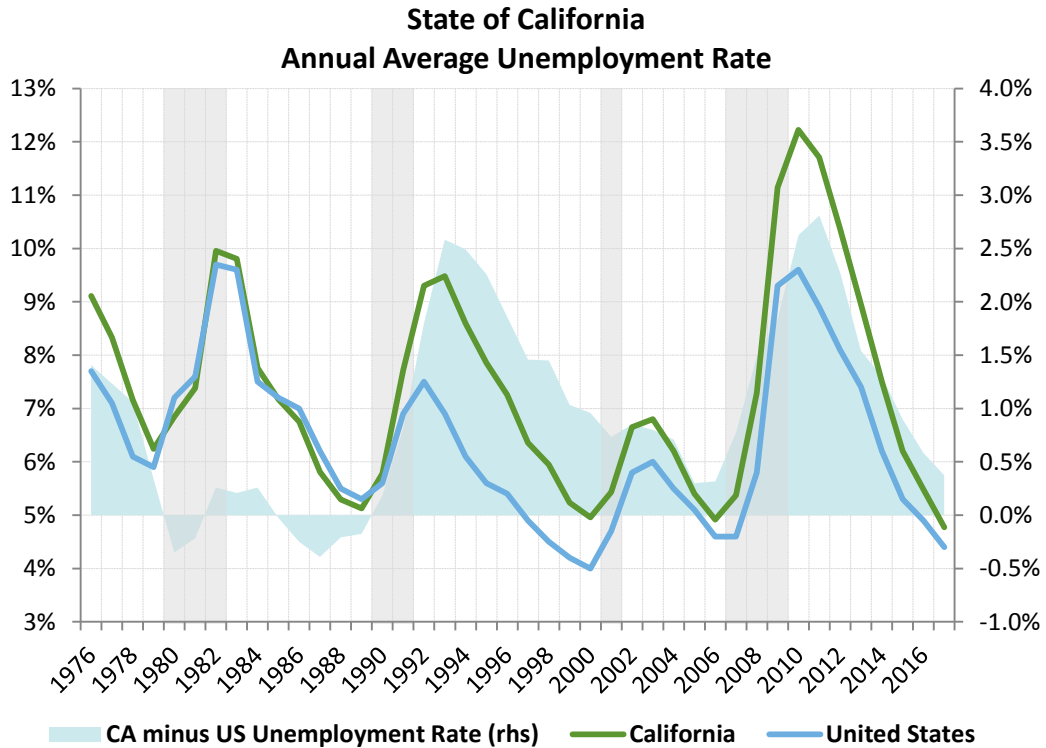
Since the mid-1970s the unemployment rate for California has exhibited a recurring pattern. During national economic recessions and for a period of time thereafter the unemployment rate in California increased faster than in the nation as a whole. The difference between the state's unemployment rate and the nation's has risen to above two percentage points on two occasions since 1976: first, following the early 1990s recession and again following the recession that ended in 2009. Despite the underperformance in this measure during economically weak periods, once the state's unemployment rate began to fall during the subsequent economic recoveries, it has fallen at a faster pace than the nation's, and most recently closed the gap in 2017 to the narrowest since 2006.

Another measure of employment health comes from the Census Bureau's Longitudinal Business Database (LBD), which contains the results of a census of business establishments and firms in the U.S. The census includes measures of establishment openings and closings, firm startups, job creation and destruction by firm size, age, and industrial sector, and several other statistics on business dynamics. One such measure is the net job creation rate, which takes into account gross job creation and gross job destruction figures within a year's period, in order to find net job creation rates among businesses of all sizes, both nationally as well as within a given state. Like all aggregate economic statistics, the net job creation rate is not without its flaws, as it fails to capture the quality of jobs being destroyed and created. However, it may be useful in assessing the general trend of business dynamism within a state. The net job creation rates for California and the nation averaged 2.39% and 1.98%, respectively, in the 38-year period ending 2015. Measuring from 2009 through the most current year of the survey (2015), California's annual average net job creation rate has been slightly above the nation's, particularly in the last three years of survey history. Akin to the pattern exhibited with the unemployment rate, the net job creation rate has also underperformed the nation during and for a period of time after national economic recessions.

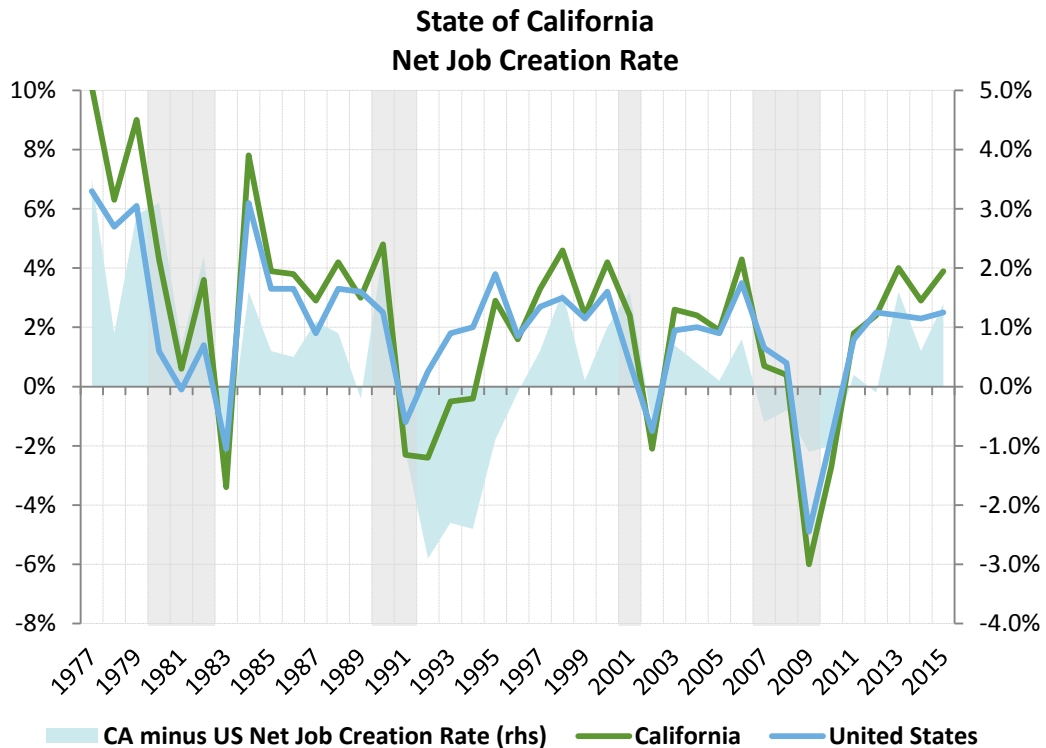
The unemployment rate and net job creation statistics indicate that while California's economy has exhibited more volatility than the nation's since the mid-1970s, it has maintained a more dynamic jobs climate, one that has enabled businesses in the state to readjust relatively quickly to changes taking place in the broader economy. This dynamism may help the state take advantage of any structural labor market changes that have taken place since 2008.

The charts on the following page illustrate the trend in California's unemployment and net job creation rates.

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Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Fidelity Capital Markets; July 17, 2018



Source: Census Bureau Longitudinal Business Database, Fidelity Capital Markets; July 17, 2018
 Note: Gray bars denote years in which recession occurred.

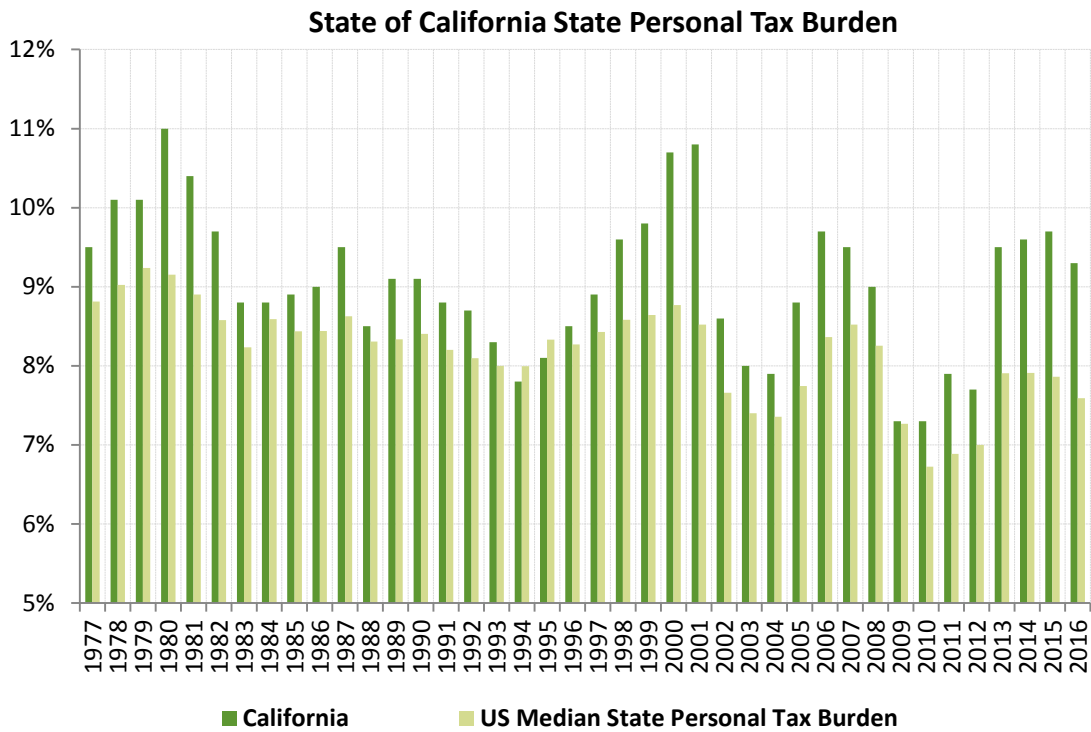
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California is a wealthy state, having ranked sixth highest in per capita personal income (PCPI) in 2017. The state's PCPI relative to the nation experienced a period of decline from the mid-1970s until the mid-1990s. However, since 1994, California's PCPI has generally been rising when compared to the nation, increasing to 116% of the U.S. in 2017, which was the highest since 1981. California also had the nation's 9th highest state personal tax burden at 9.3%, as compared to the median for the states of 7.6%. The state personal tax burden is calculated by taking total state tax revenue excluding corporate income and severance taxes divided by total state personal income excluding federal transfer receipts. Importantly, the state personal tax burden does not include local taxes such as property and local sales taxes, which if included could push California further above the national average. Since the late 1970s the national median state personal tax burden has generally declined while California's has fluctuated in a wide range, ending 2017 roughly where it was back in 1977, or slightly above its long-term average 9.1%. Spikes in the state's personal tax burden have tended to coincide with specific legislation aimed at closing budget gaps due to significant drops in tax revenue.

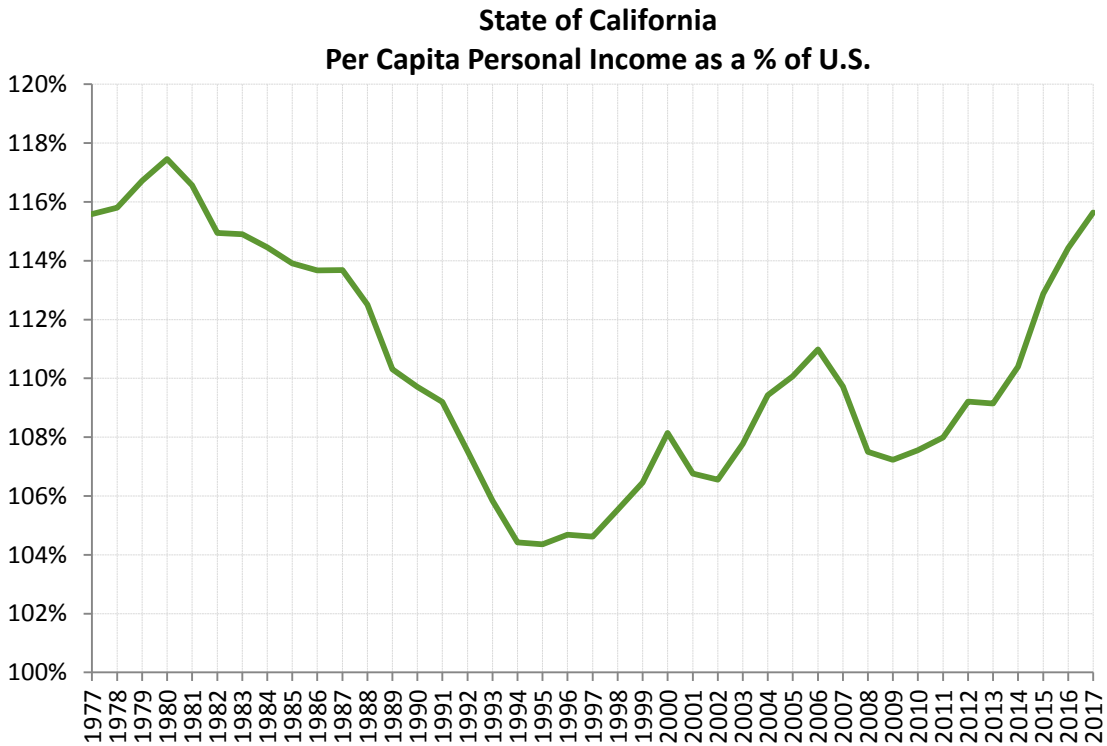
Over the past 20 years higher living costs in the state may have pressured its tax base, which has exhibited outmigration in terms of shifts in adjusted gross income (AGI). Looking solely at changes in a state's population may provide limited value in this regard because it does not directly measure changes in the tax base. Rather, the migration of AGI between and among the states provides a more accurate measure of the trend in a state's tax base in our opinion. The Statistics of Income Division of the IRS maintains records of all individual income tax forms filed in each year, including the state of residence of the filers. The data used to produce the migration statistics come from individual income tax returns and represent between 95% and 98% of total annual filings. One gauge of the degree of movement in a state's tax base is the extent to which it is on the sending or receiving end of AGI migration. The net dollar flow of AGI between California and other states, as well as the number of inflows received from and outflows sent to every other state, provide a good indication of how California's tax base is changing. Since the 1992-1993 period California has averaged annual net AGI outmigration of \$2.3 billion, although due to tax base growth, the outflow as a percentage of the tax base has eased from over -1.0% in the early 1990s to -0.20% in recent years. For the most recent 2015-2016 period the state lost part of its tax base to 26 other states, meaning that it had a net inflow from 24 states. The trend in terms of breadth has been positive, as the number of states on the receiving end of California's net outmigration has been declining, albeit irregularly, since the early 1990s – from 48 in the 1993-1994 period to the more neutral number of 26 in 2015-2016.

The charts on the following pages illustrate the trend in the state's per capita personal income, tax burden, and tax base.

Introduction

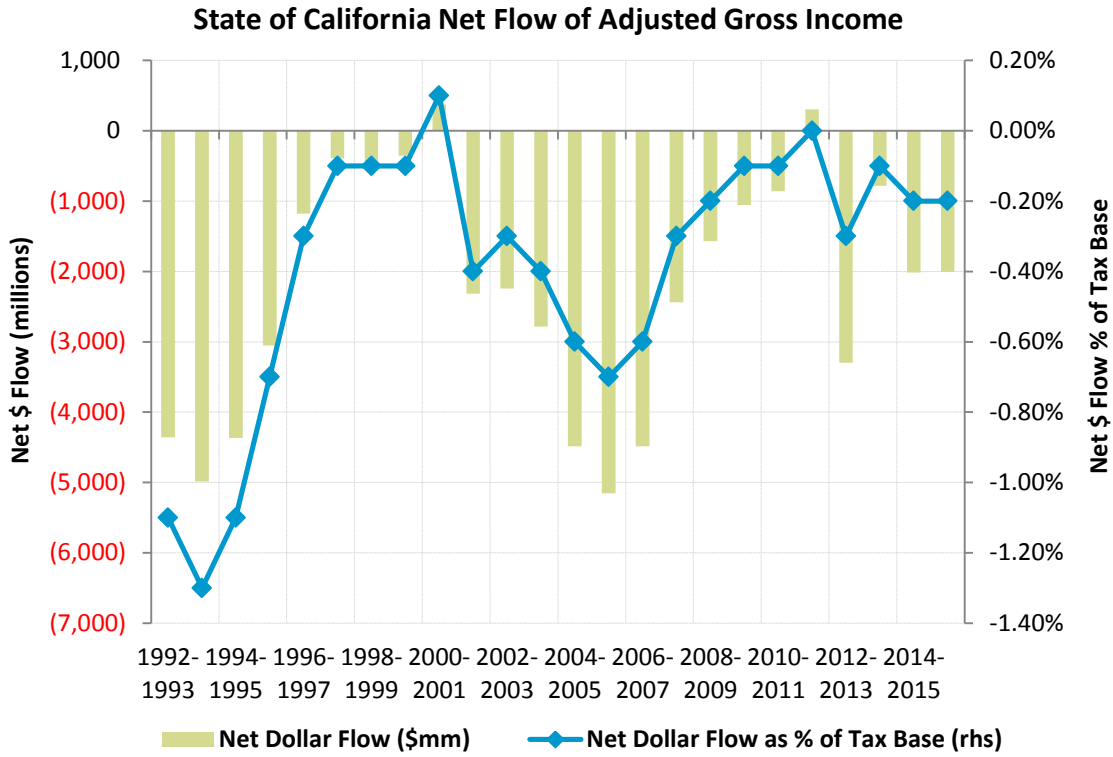


Source: Tax Foundation, Fidelity Capital Markets; July 17, 2018

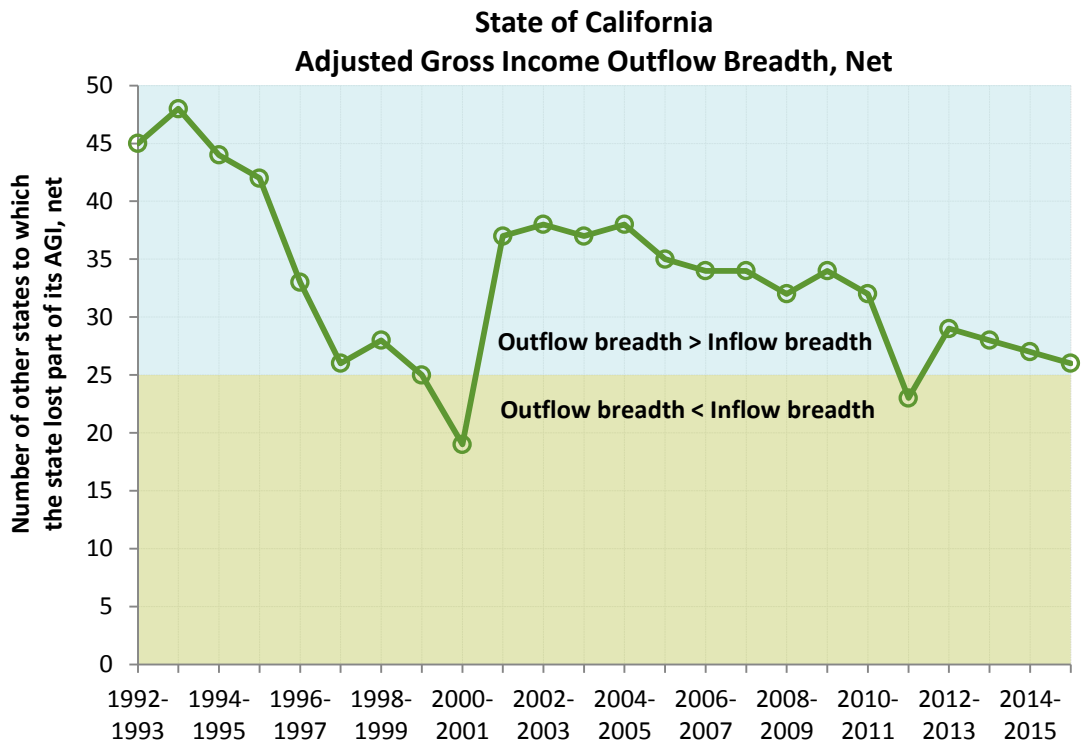


Source: Bureau of Economic Analysis, Fidelity Capital Markets; July 17, 2018

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Source: IRS, Fidelity Capital Markets; July 17, 2018



Source: IRS, Fidelity Capital Markets; July 17, 2018

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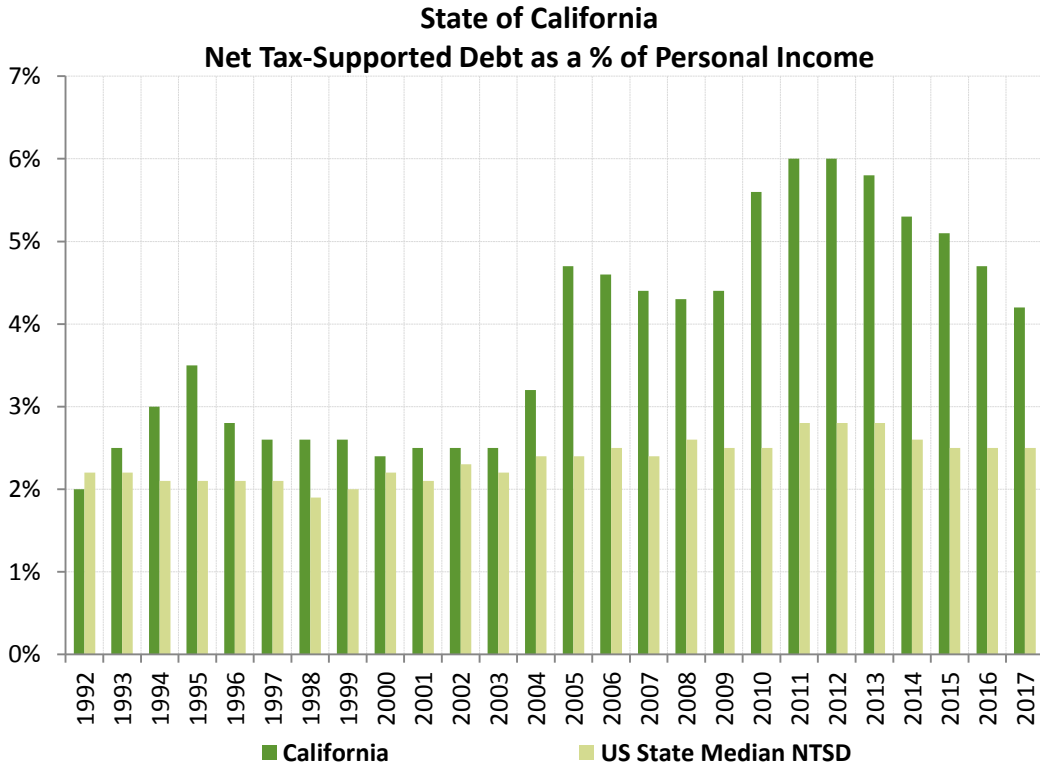
California's wealth and large economy have enabled it to support a large debt burden. Total net tax supported debt (NTSD) of \$87 billion was the highest among states, and 43% higher than the next largest state's NTSD (New York). However, relative to personal income, California's NTSD ranked thirteenth, at 4.2%; the median for U.S. states was 2.5%. The state's NTSD has steadily declined in recent years, ending 2017 at the lowest level since 2004. Prior spikes in the state's NTSD were driven by deficit financing used to close budget gaps.

California's pension system was reported to be funded at approximately 67% as of June 30, 2017, with an unfunded liability of \$88 billion. While some reforms to limit the growth trajectory of benefits have been introduced through the budgetary process, other proposals will require a constitutional amendment, possibly making their implementation more difficult. Further constraining the state's budget is the growing liability for other post employment benefits (OPEB), which had a reported unfunded liability of \$86 billion.

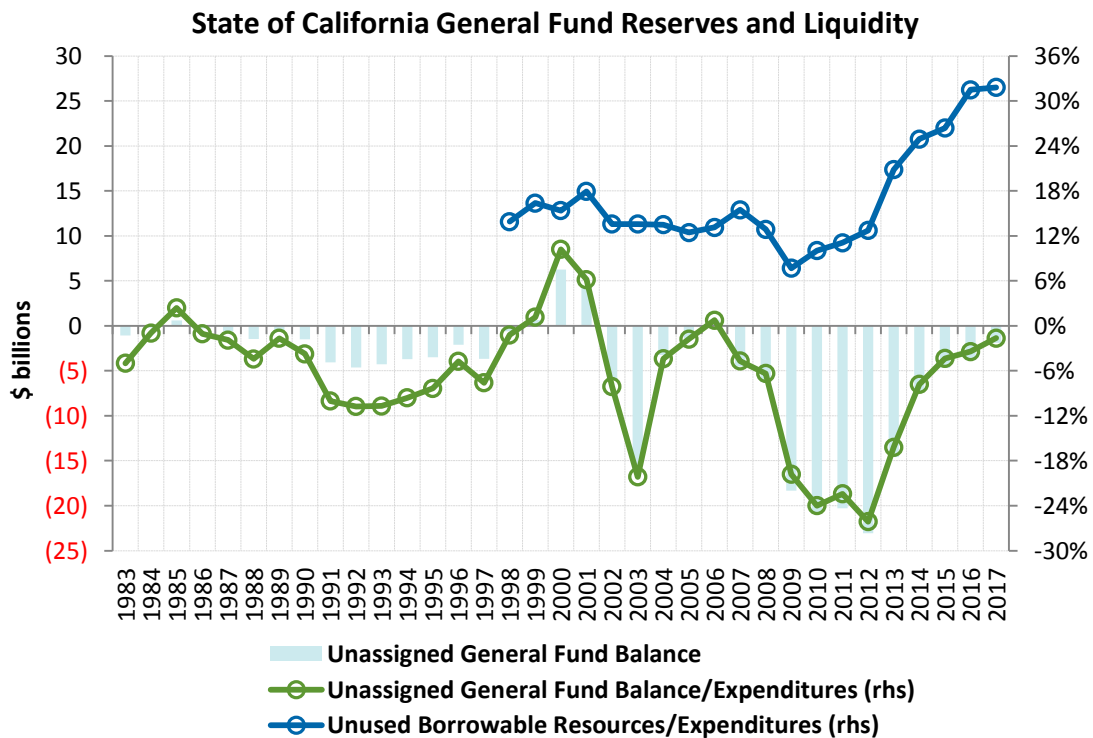
One measure of a state's financial flexibility is its unrestricted reserves and rainy day fund balances. At fiscal year end 2017, California had unrestricted reserves in its general fund of negative \$1.9 billion, and a restricted rainy day fund balance of \$6.7 billion; the combined balance equated to 4.1% of general fund expenditures. Proposition 2, approved by voters in November 2014, replaced the Proposition 58 (2004) version of the rainy day reserve, and requires that the reserve receive annual transfers from the state's general fund under certain conditions. The general fund balance has improved substantially in recent years after reaching a low of negative \$23 billion at fiscal year end 2012, or -26% of general fund expenditures. The state had \$37 billion in liquidity at fiscal year end 2017, or 32% of general fund expenditures, and the highest level since 1998 when the state began reporting this information. Liquidity is measured as total unused borrowable resources – excess fund balances held outside the general fund in the state treasury – that are available to the general fund if needed.

The charts on the following page illustrate the trend in the state's net tax supported debt, reserve levels, and liquidity.

Introduction



Source: Moody's, Fidelity Capital Markets; July 17, 2018



Source: California CAFRs, State Dept. of Finance, State Controller, Fidelity Capital Markets; July 17, 2018

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General Obligation Bonds

Moody's Aa3 S&P AA- Fitch AA-

Purpose

- Bond proceeds were used to finance various infrastructure, environmental, and transportation capital project, in addition to finance projects for public elementary and higher education.

Security

- Full faith and credit obligation of the State of California
- The California constitution requires the designated fiscal officer to set apart from the first revenues received by the state a sufficient sum to pay general obligation bond debt service if the state fails to make sufficient provision for such payment, subject only to the provision in the constitution that creates a higher priority for the support of the public school system and public institutions of higher education.

Anticipated Borrowings

- None specified.
- As of June 30, 2017 the state had \$34 billion of general obligation bonds authorized but not issued.

Bonds Outstanding

- \$74 billion as of June 30, 2017

Central Valley Project Water System Revenue Bonds

Moody's Aa1 S&P AAA Fitch NR

Purpose

- Bond proceeds were used to fund the State Water Project and to refund certain of the Department's outstanding Water System Revenue Bonds and other items.
- The State Water Project is a complex of dams, water storage facilities and other facilities which have been constructed by the Department for the purpose of water supply, flood control, and other benefits.

Security

- The Bonds are secured by a pledge of Revenues under the Resolution which are the portion of the receipts of the Department under the Water Supply Contracts resulting from the construction, acquisition or operation of Water System Projects, income from the investment of moneys held in the Reserve Fund and certain other moneys received by the Department under the Water Supply Contracts. The Department projects that the Metropolitan Water District of Southern California will account for approximately 50% of pledged revenues.

Rate Covenant

- The Department has covenanted to charge amounts under the Water Supply Contracts sufficient to repay all Water System Project costs, and that Revenues, in each year, after the deduction of maintenance and operation expenses will be least equal to 1.25 times the aggregate debt service on all Bonds in such year.

Bonds Outstanding

- Revenue Bonds: \$2.6 billion as of June 30, 2017
- General Obligation Bonds: \$88 million as of June 30, 2017

Central Valley Project Water System Revenue Bonds (cont.)

Moody's Aa1 S&P AAA Fitch NR

Debt Service Reserve Fund

- An amount equal to one-half of MADS.

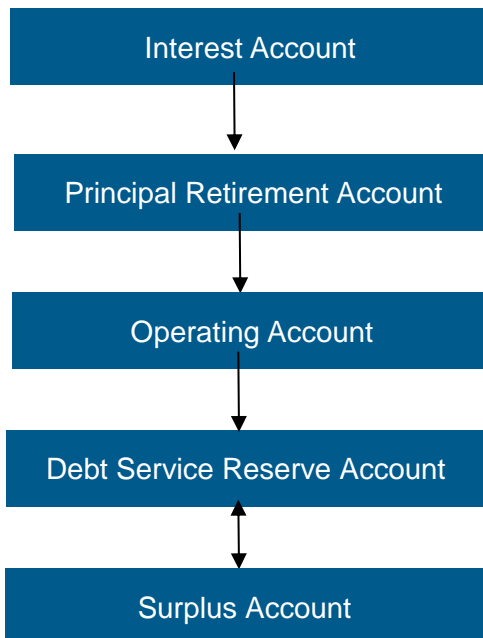
Anticipated Borrowings

- None specified.

Additional Bonds Test

- The Department may issue Additional Bonds on a parity basis for the cost of any Water System Project or for refunding purposes if (1) after the issuance of such Bonds, estimated Revenues in each year will not be less than the sum of 1.25 times debt service to be paid from revenues, plus estimated Water System Operating Expenses, (2) the Debt Service Reserve Account established is projected to contain on the first interest payment date on which interest for such additional Bonds is payable from revenues, an amount equal to one-half of the MADS, and (3) the Treasurer must have received evidence that the issuance of the additional Bonds will not result in the lowering of any rating then assigned to any then outstanding Bonds.

Flow of Funds



Source: Official Statement

Power Supply Revenue Bonds

Moody's Aa1 S&P AA Fitch AA+

Purpose

- The Bonds financed and refinanced the costs of the Power Supply Program. The Power Supply Program was established by DWR in 2001 in the midst of the California Energy Crisis, when a state of emergency was declared by the Governor that the investor-owned utilities (IOUs) could not supply electric power sufficient to prevent widespread and prolonged disruption of electric service in California. The state of California purchased electricity using its General Fund to pay for the supply for a portion of the retail load the IOUs could not serve. Initially the Power Supply Revenue Bonds were used to repay the state's General Fund for the initial electricity purchase and other prior power purchases.

Rate Covenant

- The California Public Utilities Commission (CPUC) has irrevocably covenanted in the Rate Agreement to impose Bond Charges sufficient to provide moneys so that amounts available for deposit in the Bond Charge Payment Account, together with amounts on deposit in the Bond Charge Payment Account, are at all times sufficient to pay debt service on the Bonds and other Bond Related Costs.

Security

- The Bonds are payable from Bond Charge Revenues, which constitutes part of the Trust Estate securing the Bonds. The Trust Estate is defined to include "Revenues" which include "Bond Charge Revenues," "Power Charge Revenues" and "Direct Access Power Charge Revenue."
- "Bond Charge Revenues" are Revenues received by DWR arising from Bond Charges imposed by the CPUC upon customers in the service areas of the three major California IOUs.
- "Power Charge Revenues" are Revenues received by DWR arising from Power Charges imposed by the CPUC upon customers in the service areas of the IOUs.
- "Direct Access Power Charge Revenues" are Revenues received by DWR arising from Direct Access Power Charges imposed by the CPUC upon any person receiving power from an "Electric Service Provider."

Power Supply Revenue Bonds (cont.)

Moody's Aa1 S&P AA Fitch AA+

Rate Covenant (cont.)

- The CPUC has no authority to rescind, alter or amend its obligations under the covenant. Under the Act, the rights, powers and duties of the CPUC may not be diminished or impaired in the manner that would adversely affect the interests or rights of Bondholders.
- DWR is required to meet its costs from a revenue requirement that is presented at least annually to the CPUC. The agreement requires CPUC to include in the rates of the state's IOUs sufficient funds to meet DWR's revenue requirement.
- The CPUC cannot reject DWR's charge requirement whether or not DWR continues to purchase or sell electricity.

Additional Bonds Test

- Additional Bonds may be issued only with permission of the CPUC.

Anticipated Borrowings

- None anticipated.

Security (cont.)

- The use of amounts in the Bond Charge Collection Account is subject to the possible prior use to pay Priority Contract Costs.
- The IOUs collect DWR's Bond Charges and Power Charges solely as agents of DWR.

Bonds Outstanding

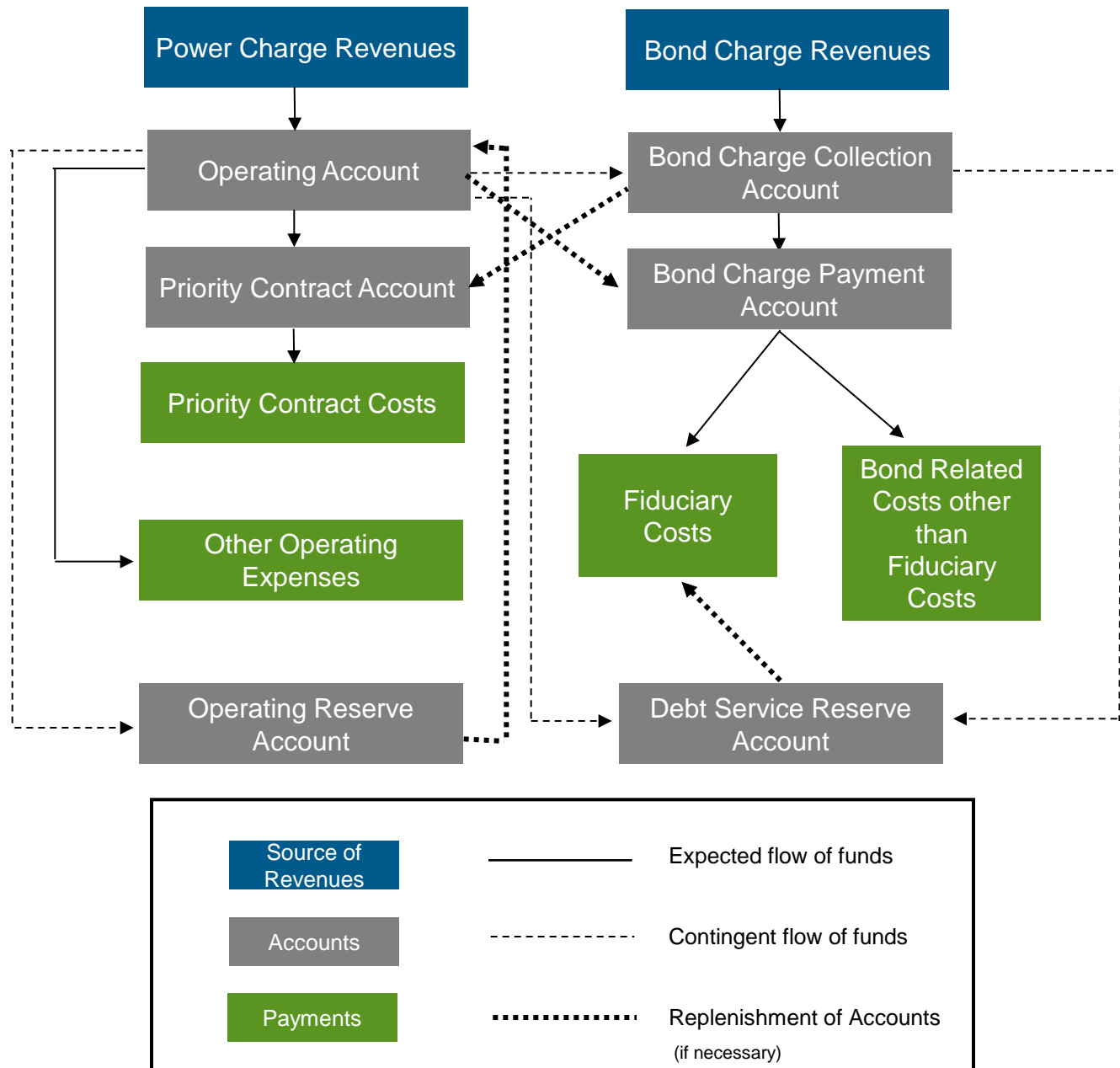
- \$4.1 billion as of June 30, 2017

Debt Service Reserve Fund

- The Operating Reserve Account was established and is maintained by DWR at an amount equal to the Operating Reserve Account Requirement which is equal to the greater of: 1) the largest amount by which Operating Expenses exceed Power Charge Revenues during any seven month period commencing in that revenue requirement period and (2) 12% of DWR's projected annual operating expenses.
- The Debt Service Reserve Fund must be fully funded in an amount equal to MADS.

State of California Department of Water Resources

Power Supply Revenue Bonds Flow of Funds



Source: Official Statement

State Public Works Board of the State of California

Lease Revenue Bonds

Moody's A1 S&P A+ Fitch A+

Purpose

- Bond proceeds were used to finance and refinance the costs of design, construction, and equipping certain capital improvements to various facilities for various departments including: The Department of Corrections and Rehabilitation, The Regents of the University of California, The Trustees of the California State University Projects, California Community College, and others.

Bonds Outstanding

- \$9.4 billion as of June 30, 2017

Anticipated Borrowings

- The Board typically issues approximately \$200 to \$400 million in Bonds annually.

Security

- Each Series of Bonds is separately secured. Each Series of Bonds is secured by a first pledge of Revenues, which consists primarily of Base Rent to be paid by the Participating Agency.
- Each Participating Agency has covenanted to include all rental payments in its annual budget and make necessary annual allocations for all such rental payment. The Governor's Office makes the final determination of all amounts to be included in the annual budget proposed by the Governor to the Legislature.
- The State has covenanted that it will include all rental payments in its annual budget and make necessary annual allocations for all such lease payments. The Act provides a continuing appropriation of moneys from the fund in the state Treasury should the Agency operate without a budget. The Act requires that debt service be allocated from the "first lawfully available funds."

Lease Revenue Bonds (cont.)

Moody's A1 S&P A+ Fitch A+

Debt Service Reserve Fund

- The reserve fund requirement is an amount equal to the sum of the greatest of: (1) the sum of the largest single payments of Semi-Annual Debt Service relating to the two Facilities with the largest single payment of the Semi-Annual Debt Service remaining, (2) the sum of the largest single payments of Semi-Annual Debt Service attributable to all Facilities situated within that Locality in the State for which such sum is the largest, (3) 10% of Maximum Aggregate Semi-Annual Debt Service, or (4) the largest payments of Semi-Annual Debt Service remaining for any Interest Payment Date(s) coming due any calendar month; plus (B) an amount not to exceed 1% of the amount calculated under the part above, as determined by the State Treasurer at the time of issuance of any Series.
- Master Indenture Reserve is a shared reserve which may be drawn to cover debt service in the event any lease payments are not available due to construction delay or project abatement that is not covered by the rental interruption insurance.

Security (continued)

- The Lease Agreement between the State and the Participating Agency requires that the Base Rental will be abated proportionately as to the part or portion in the event of damage, destruction or substantial interference with use of the leased facility. The Facility Lease also requires the Participating Agency to maintain rental interruption insurance or use and occupancy insurance to cover loss of the use of the Facility in an amount to cover not less than the succeeding two consecutive years' Base Rental.
- With regard to Community College District obligations, the Chancellor and State Controller will withhold from its annual apportionment of funds from Section B of the State School Fund an amount necessary to satisfy its lease obligation. As a result, the funds used to pay each Community College District's annual lease obligation will be "intercepted" by the state.

The Regents of the University of California

General Revenue Bonds

Moody's Aa2 S&P AA Fitch AA

Purpose

- Bond proceeds are used to refinance the acquisition and construction of certain facilities of the University of California including student housing, parking facilities, student centers, recreation and events facilities, research facilities, and other facilities.

Rate Covenant

- Regents shall set rates to be in the amount sufficient to pay the principal of and interest on the Bonds and amounts due and payable on Ancillary Obligations for the then-current Fiscal Year.

Debt Service Reserve Fund

- None.

Security

- Bonds are secured by a pledge of General Revenues, which consist of operating and non-operating revenues of the University such as gross tuition and fees, indirect cost recovery, auxiliary revenues and certain other unrestricted revenues. Gross Revenues, however, does not include appropriations of the State of California, restricted money, gross revenues of the University Medical Centers, and other items.

Bonds Outstanding

- \$10.7 billion as June 30, 2017

Additional Bonds Test

- None.

Anticipated Borrowings

- None anticipated.

The Regents of the University of California

Medical Center Pooled Revenue Bonds

Moody's Aa3 S&P AA- Fitch AA-

Purpose

- Bond proceeds were used to refinance the acquisition, construction and equipping of certain healthcare facilities of the University of California. The University consists of ten campuses, including five campuses with schools of medicine. The five medical centers are UC Davis, UC Irvine, UCLA, UC San Diego and UC San Francisco.

Security

- Bonds are secured by a pledge of and lien on the Gross Revenues of the five medical centers. The 2008 Series D and the parity 2007 A, B, and C Bonds are subordinate to Senior Lien Indebtedness which includes the UCLA-Medical Center and the UCSD-Medical Center Bonds (collectively, the Medical Center Revenue Bonds).

Rate Covenant

- The Regents is required to set rates to be sufficient in each Fiscal Year to pay the principal of and interest on Bonds then Outstanding and amounts due and payable on related Obligations.

Bonds Outstanding

- \$3.0 billion as of June 30, 2017

Additional Bonds Test

- None.

Debt Service Reserve Fund

- None.

Anticipated Borrowings

- None specified.

Trustees of the California State University

Systemwide Revenue Bonds

Moody's Aa2 S&P AA- Fitch NR

Purpose

- Bond proceeds were used to finance and refinance the acquisition, construction, renovation, and improvement of certain facilities of the California State University.

Security

- Bonds are secured on a parity basis by a first lien on and pledge of Gross Revenues, which consist primarily of user fees collected from students attending CSU campuses.

Rate Covenant

- The Trustees has covenanted to maintain and set rates so as to cause Net Income Available for Debt Service to be in an amount at least equal to Aggregate Debt Service for all Indebtedness and Designated Auxiliary Debt for such Fiscal Year.

Bonds Outstanding

- \$5.8 billion as of June 30, 2017

Additional Bonds Test

- The Trustees have covenanted that they will not incur any additional indebtedness secured by a senior lien.
- The Board may issue Parity Lien debt in the event Net Income Available for Debt Service is at least equal to Aggregate Debt Service of all Senior Lien Debt and Parity Lien Debt.

Debt Service Reserve Fund

- None.

Anticipated Borrowings

- None specified.

California Housing Finance Agency

Home Mortgage Revenue Bonds

Moody's A1 S&P AA- Fitch NR

Purpose

- The Bonds provide financing for the Agency's Home Mortgage Program which purchases eligible mortgage loans, secured by trust deeds on newly constructed or existing single family homes, condominiums, planned unit developments and manufactured housing permanently attached to the land.

Security

- The Bonds are special obligations of the Agency, payable solely from the revenues, assets and properties pledged under the Home Mortgage Revenue Bond Indenture, including the single family mortgage loans financed under the Indenture and certain reserve accounts.

Debt Service Reserve Fund

- The Reserve Account is sized at 3% of the aggregate outstanding principal amount of mortgage loans outstanding.

Bonds Outstanding

- \$1.7 billion as of June 30, 2017

Anticipated Borrowings

- None specified.

General Obligation Bonds

Moody's Aa2 S&P AA Fitch AA-

Purpose

- Bond proceeds were used to finance Contracts of Purchase to provide mortgage loans to qualified borrowers.

Debt Service Reserve Fund

- None.

Bonds Outstanding

- \$613 million as of June 30, 2017

Anticipated Borrowings

- None specified.

Security

- The Bonds are first payable from monies transferred from the Veterans Farm and Home Building Fund of 1943 ("1943 Fund") into the Veterans Bond Payment Fund and to the extent moneys in the Veterans Bond Payment Fund are insufficient from the General Fund of the State.
- On each debt service payment date monies in the 1943 Fund are legally required to first be transferred to the Veterans Bond Payment Fund within the State Treasury to pay debt service on the Veterans G.O. Bonds. Only after the transfer of the full debt service payment on the Veterans G.O. Bonds has been made can the debt service on the Veterans Revenue Bonds be satisfied with funds from the 1943 Fund.

Home Purchase Revenue Bonds

Moody's Aa3 S&P AA Fitch AA-

Purpose

- Bond proceeds were used to finance Contracts of Purchase to provide mortgage loans to qualified borrowers.

Debt Service Reserve Fund

- The Bond Reserve Account is sized at 3% of the aggregate outstanding principal amount of all fixed rate Bonds.

Bonds Outstanding

- \$332 million as of June 30, 2017

Anticipated Borrowings

- None specified.

Security

- The Bonds are special obligations of Department secured by a secondary and subordinate interest in the Veterans Farm and Home Building Fund of 1943 ("1943 Fund"). The payment structure makes the Bonds' interest in the 1943 Fund secondary and subordinate to the Veterans General Obligation Bonds.
- On each debt service payment date monies in the 1943 Fund are legally required to first be transferred to the Veterans Bond Payment Fund within the State Treasury to pay debt service on the Veterans G.O. Bonds. Only after the transfer of the full debt service payment on the Veterans G.O. Bonds has been made can the debt service on the Veterans Revenue Bonds be satisfied with funds from the 1943 Fund.

East Bay Municipal Utility District

Wastewater System Revenue Bonds

Moody's Aa2 S&P AAA Fitch AA+

Purpose

- Bond proceeds were used to finance improvements to the wastewater system, retire a certain amount of the District's Commercial Paper Notes, and pay the costs of the issuance of certain Bonds.

Security

- The Bonds are secured by Net Wastewater Revenues of the District, and are subordinate to any of the District's Senior Wastewater Bonds. There are no Senior Wastewater Bonds currently outstanding.

Rate Covenant

- The District covenants that it will at all times set rates such that Net Revenues of the Wastewater System will provide at least 1.1 times the amount of Debt Service on all Senior Wastewater Bonds, Subordinated Wastewater Bonds and Parity Debt for such Fiscal Year.

Bonds Outstanding

- \$394 million as of June 30, 2017

Additional Bonds Test

- Additional Bonds may be issued if: the sum of (1) the Net Revenues for any period of 12 consecutive months during the 18 months preceding the issuance of such additional series of Bonds; and (2) 75% of the amount by which the Net Revenues would have been increased had any increase in rates and charges been in effect for a full year; and (3) 75% of the projected increase in annual Net Revenues to be provided by additional facilities under construction or to be constructed, shall have been equal to at least 1.25 times MADS of the debt outstanding and the proposed debt.

Debt Service Reserve Fund

- Reserve funds are established on a series by series basis. Reserve funds established in connection with one series are not available for the payment of, and do not in any manner secure, any other series.

Anticipated Borrowings

- None specified.

East Bay Municipal Utility District

Water System Revenue Bonds

Moody's Aa1 S&P AAA Fitch AA+

Purpose

- Bond proceeds were used to finance improvements to the Water System, retire a certain amount of the District's Commercial Paper Notes, and pay the costs of the issuance of certain Bonds.

Security

- The Bonds are secured by a Net Water Revenues of the District. There are no Senior Water Bonds currently outstanding.

Rate Covenant

- The District covenants that it will at all times set rates such that Net Revenues of the Water System will provide at least equal to 1.1 times the amount of Debt Service on all Senior Water Bonds, Subordinated Water Bonds and Parity Debt for such Fiscal Year.

Bonds Outstanding

- \$2.4 billion as of June 30, 2017

Debt Service Reserve Fund

- Reserve funds are established on a series by series basis. Reserve funds established in connection with one series are not available for the payment of, and do not in any manner secure, any other series.

Additional Bonds Test

- Additional Bonds may be issued if: the sum of (1) the Net Revenues for any period of 12 consecutive months during the 18 months preceding the issuance of such additional series of Bonds; and (2) 75% of the amount by which the Net Revenues would have been increased had any increase in rates and charges been in effect for a full year; and (3) 75% of the projected increase in annual Net Revenues to be provided by additional facilities under construction or to be constructed, shall have been equal to at least 1.25 times MADS of the debt outstanding and proposed debt.

Anticipated Borrowings

- None specified.

General Obligation Bonds

Moody's Aa2 S&P AA Fitch AA-

Purpose

- Bond proceeds were used to finance various projects for the purpose of the protection of public health and safety, animal shelter facilities, construction of new and replacement emergency response, cleaning up polluted storm water, and other purposes.

Security

- Bonds are secured by the full faith and credit of the City of Los Angeles, payable from proceeds of ad valorem taxes that may be levied without limitation as to rate or amount.

Anticipated Borrowings

- None specified.

Bonds Outstanding

- \$720 million as of June 30, 2017

Municipal Improvement Corporation of Los Angeles

Lease Revenue Bonds

Moody's Aa3 S&P AA- Fitch A+

Purpose

- Bond proceeds were used to finance and refinance the costs of acquisition of certain capital equipment and an office building complex and parking structure used by the City and to reimburse the City for internal borrowings relating to the acquisition of Figueroa Plaza.

Debt Service Reserve Fund

- The Reserve Account is maintained for certain bond issues prior to 2016, in an amount equal to the lesser of: 10% of the initial principal amount of said Series of the Bonds; MADS; or 125% of the average annual aggregate Debt Service.

Additional Bonds Test

- None.

Security

- The Bonds are secured by Pledged Revenues, which consists of Basic Lease Payments made pursuant to the Lease Agreements. The Basic Lease Payment payable under a Lease Agreement relating to a particular Series of Bonds shall not be applied to pay principal and interest on any other Series of Bonds. Under the Lease Agreements, the City covenants to include all Lease Payments payable under the Equipment Lease Agreement and the Facility Lease Agreement in its annual budgets and make necessary annual appropriation.

Bonds Outstanding

- \$1.5 billion as of June 30, 2017

Anticipated Borrowings

- None specified.

Los Angeles Unified School District

General Obligation Bonds

Moody's Aa2 S&P AA- Fitch AAA

Purpose

- Bond proceeds were used to finance new construction, acquisition, rehabilitation and upgrading of various school facilities.

Security

- The general obligation bonds are secured by an unlimited property tax pledge upon all taxable property within the district boundaries.
- Debt service is secured by the district's voter-approved unlimited property tax pledge. The county rather than the district will levy, collect, and disburse the district's property taxes, including the portion constitutionally restricted to pay debt service on general obligation bonds.

Bonds Outstanding

- \$9.8 billion as of June 30, 2017

Anticipated Borrowings

- None specified.

Los Angeles County Metropolitan Transportation Authority

Proposition A Sales Tax Revenue Bonds First Tier Senior Bonds

Moody's Aa1 S&P AAA Fitch NR

Purpose

- Bond proceeds were used to fund various public transit projects.

Additional Bonds Test

- The Authority may issue additional Bonds if 35% of the Proposition A Sales Tax collected for any 12 consecutive months out of 18 consecutive months immediately preceding the issuance was at least equal to 115% of MADS.

Anticipated Borrowings

- None anticipated.

Security

- Bonds are secured by a first lien on and a pledge of Revenues, which are moneys collected from the imposition of the Proposition A Sales Tax, less 25% paid to local jurisdictions for local transit purposes and administration fees.
- The Proposition A Sales Tax was approved by voters on November 4, 1980. It imposes a sales tax of one-half of 1% of gross receipts of retailers from the sale of tangible personal property sales and on the storage, use or other consumption in the County.

Bonds Outstanding

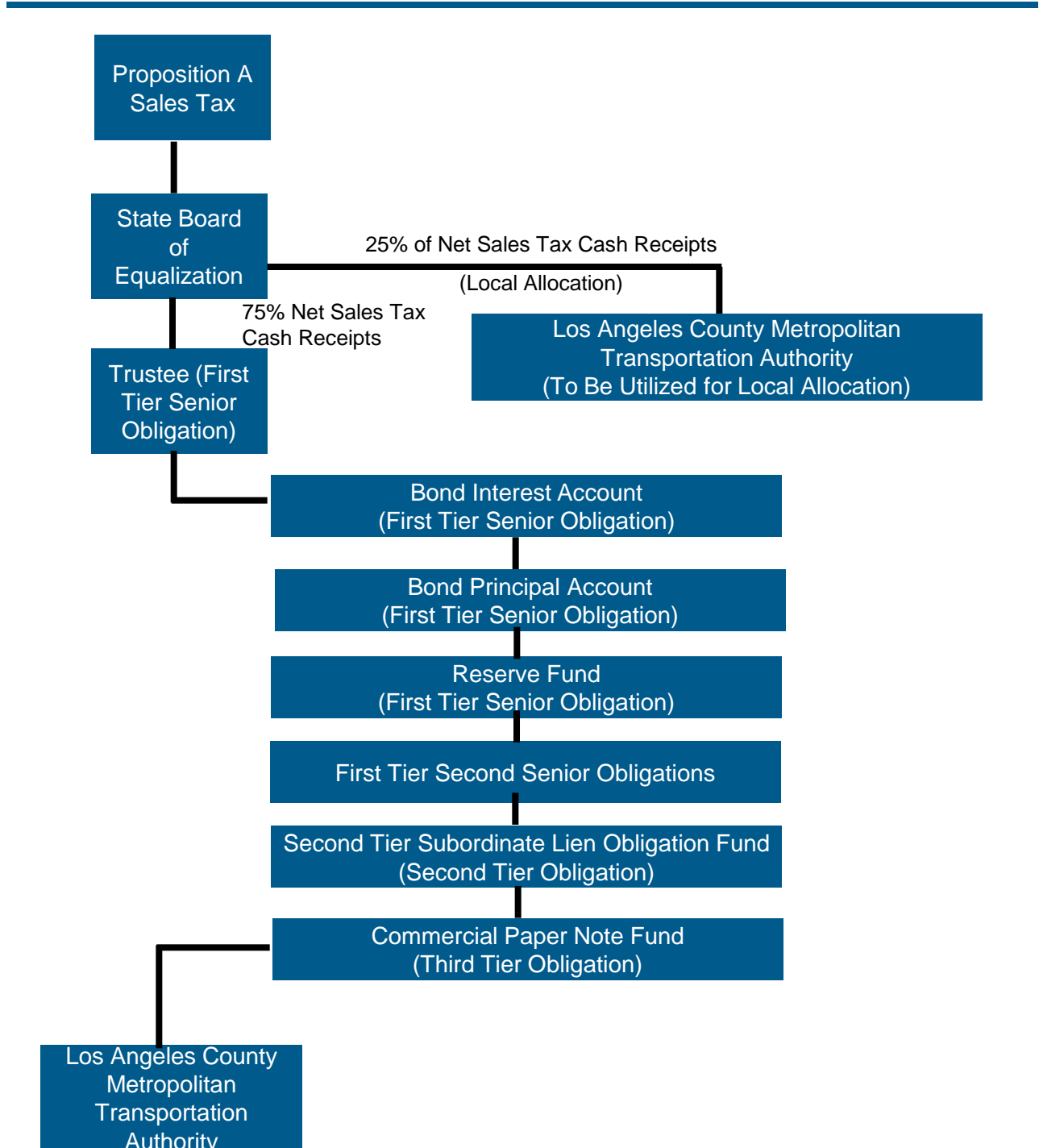
- \$910 million as of June 30, 2017

Debt Service Reserve Fund

- Required to be equal to MADS.

Los Angeles County Metropolitan Transportation Authority

Proposition A Sales Tax Revenue Bonds Flow of Funds



Source: Official Statement

Los Angeles County Metropolitan Transportation Authority

Proposition C Sales Tax Revenue Bonds Second Tier Senior Bonds

Moody's Aa2 S&P AA+ Fitch AA

Purpose

- Bond proceeds were used to fund various public transit projects.

Debt Service Reserve Fund

- An amount equal to the least of: 10% of proceeds; MADS; or 125% of AADS.

Additional Bonds Test

- Additional First Senior Bonds may be issued if: the Pledged Revenues collected for the any 12 consecutive months out of the 18 consecutive months immediately preceding the issuance at least equal to 400% of the Maximum Annual First Senior Debt Service and 130% of MADS.
- Second Senior Bonds may be issued if Pledged Revenues for any 12 consecutive months out of the 18 consecutive months immediately preceding the issuance was at least 130% of MADS for all Second Senior Bonds.

Security

- Bonds are secured by a second lien on and a pledge from Revenues, which are moneys collected as a result of the imposition of the Proposition C Sales Tax, less 20% payable to local jurisdictions for local transit purposes and administrative fees.
- The Proposition C Sales Tax was approved by voters on August 8, 1990. It imposes a sales tax of one-half of 1% of gross receipts of retailers from the sale of tangible personal property sold at retail and on the storage, use or other consumption in the County.
- Currently, there are no First Senior Bonds outstanding.

Bonds Outstanding

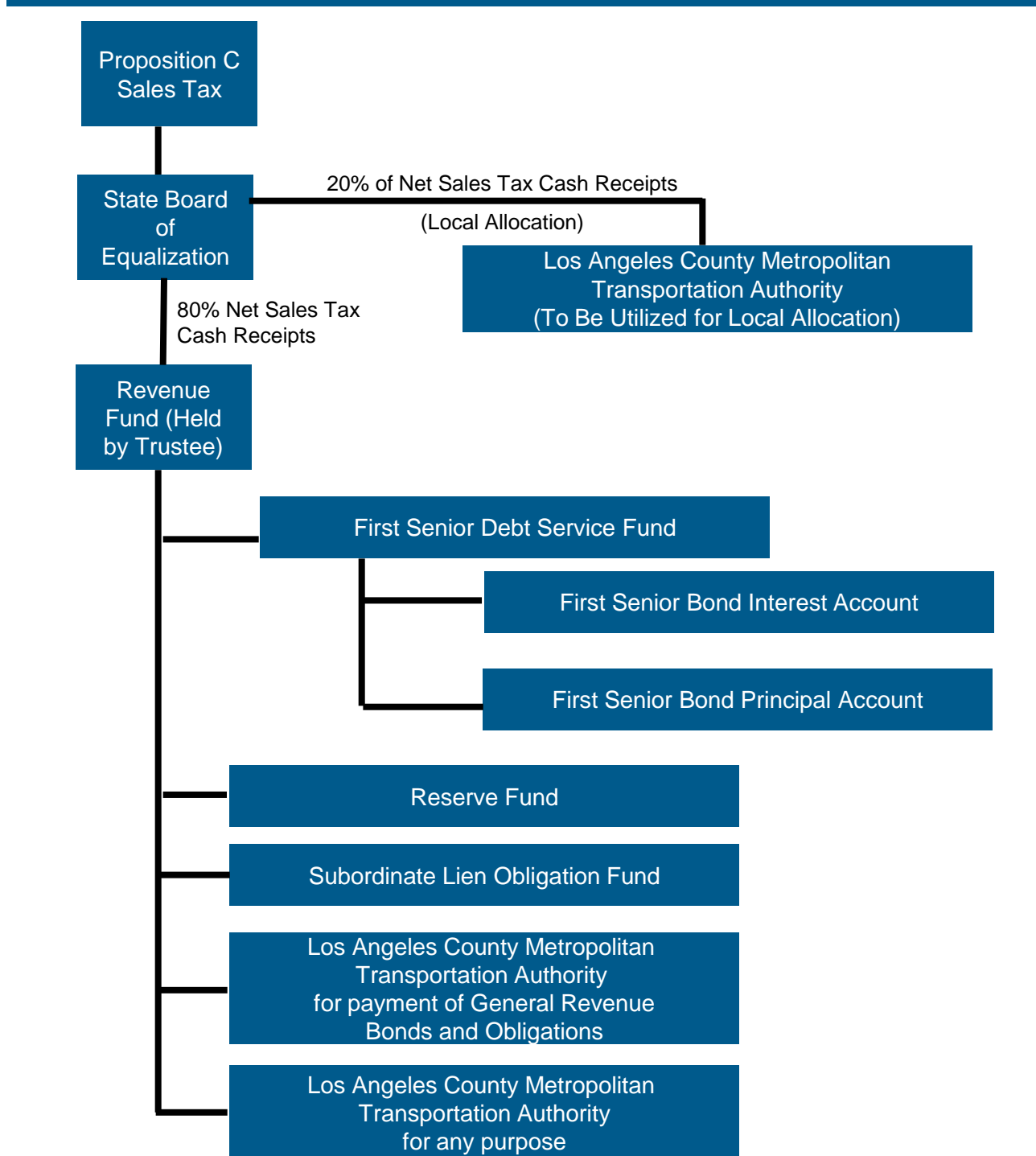
- \$1.5 billion as of June 30, 2017

Anticipated Borrowings

- None anticipated.

Los Angeles County Metropolitan Transportation Authority

Proposition C Sales Tax Revenue Bonds Flow of Funds



Source: Official Statement

Harbor Department of the City of Los Angeles

Revenue Bonds

Moody's Aa2 S&P AA Fitch AA

Purpose

- Bond proceeds were used to refund the Department's outstanding commercial paper notes and previously issued Bonds which were originally issued to finance the construction of any improvements to certain facilities owned by the Department.

Rate Covenant

- The Department has covenanted to fix rates and collect such charges to provide revenues which will at least equal 125% of Debt Service.

Debt Service Reserve Fund

- An amount equal to the lesser of 125% of average annual principal of and interest on the Bonds, the maximum aggregate annual principal of and interest on the Bonds, and 10% of the proceeds of the Bonds.

Additional Borrowings

- None specified.

Security

- The Bonds are secured by a senior lien, Net Revenue pledge of the City of Los Angeles. Bonds shall be payable out of the Revenues deposited into the Harbor Revenue Fund, which consists of all fees and revenues collected by the Department in connection with its possession, management and control of the Harbor District and Assets.

Bonds Outstanding

- \$892 million as of June 30, 2017

Additional Bonds Test

- Additional parity obligations may be issued in the event that the Net Revenues for any consecutive 12 month period during the 18 month period preceding the date of adoption will have produced a sum equal to at least 125% of Debt Service and Net Revenues for any consecutive 12 month period during the 18 month period preceding the date of execution will have produced a sum equal to at least 125% of AADs of the Bonds outstanding and proposed debt.

Wastewater System Revenue Bonds

Moody's Aa2 S&P AA+ Fitch AA+

Purpose

- Bond proceeds were used to fund the construction and improvement of the wastewater collection and treatment system of L.A. and to refund a portion of the City's Outstanding Wastewater System Revenue Bonds.

Rate Covenant

- The City must fix and collect rates in connection with the use of the System so that in each Fiscal Year Revenues must be sufficient to pay: the interest on and principal of the Outstanding Bonds; all other payments required for compliance; all other payments to meet any other obligations of the City which are payable from the Revenues; and all current operation and maintenance costs of the System. The City further agrees to establish rates such that Net Revenues are equal to at least 125% of the actual debt service.

Additional Borrowings

- None specified.

Security

- The Bonds are secured by certain revenues of the City's wastewater system. The City has pledged the Revenues to secure the payment of all Bonds. The Revenues are deposited in the Sewer Construction and Maintenance Fund held by the City Treasurer. Revenues include such items as service charges, fees, and other items but excludes property taxes, other taxes, grants, investment earnings and money for capital costs.

Bonds Outstanding

- \$2.7 billion as of June 30, 2017

Additional Bonds Test

- Additional Bonds may be issued if the City obtains a certificate prepared by a Consultant showing that Net Revenues for the immediately preceding Fiscal year or 12 consecutive months out of the 18 consecutive months immediately preceding the issuance of the propose Bonds provides at least equal to 125% coverage of MADS the Bonds outstanding and the proposed debt.

Department of Water and Power of the City of Los Angeles

Water System Revenue Bonds

Moody's Aa2 S&P AA+ Fitch AA

Purpose

- Bond proceeds were used to finance capital improvements to the Water System.

Rate Covenant

- The Department shall set rates such that revenues and other available funds will be at least sufficient to pay the principal of and interest on all outstanding Bonds and other indebtedness payable out of the Water Revenue Fund and O & M expenses.

Debt Service Reserve Fund

- None.

Anticipated Borrowings

- The Department expects to issue between \$644 million and \$1.1 billion of new debt annually for its 2019-2022 capital program.

Security

- The Bonds are special obligations of the Department payable only from the Water Revenue Fund, and not out of any other fund or moneys of the Department or the City. The Water Revenue Fund is a separate fund established by the Charter in the City Treasury. All revenues collected by the Department in connection with the Water System are to be deposited in the Fund.

Bonds Outstanding

- \$4.6 billion as of June 30, 2017

Additional Bond Test

- The Department may issue Additional Parity Obligations if for any 12 consecutive month period within the 18 consecutive month period immediately prior to the issuance, Additional Parity Obligations shall have amounted to 1.25 times the maximum annual adjusted debt service on all outstanding additional parity obligations.

Power System Revenue Bonds

Moody's Aa2 S&P AA Fitch AA

Purpose

- Bond proceeds were used to provide funds to pay costs of capital improvements to the Power System.

Rate Covenant

- Pursuant to the Bond Resolution, the Board will fix rates and collect charges for service from the Power System, shall be at least sufficient to pay the principal of and interest on the Outstanding Bonds and all other indebtedness payable out of the Power Revenue Fund.

Debt Service Reserve Fund

- None.

Additional Borrowings

- The Department expects to issue between \$611 million and \$850 million of new debt annually for its 2019-2022 capital program.

Security

- The Bonds are payable from the Power Revenue Fund. The Power Revenue Fund is a separate fund established by the Charter in the City Treasury. All revenues from every source collected by the Department in connection with the possession, management and control of the Power System are deposited in the Fund.

Bonds Outstanding

- \$8.6 billion as of June 30, 2017

Additional Bonds Test

- Additional Parity Obligations may be issued if the Adjusted Net Income for any 12 consecutive month period within the 18 consecutive months ending immediately prior to the issuance of such debt shall have been at least 1.25 times the MADS of the debt outstanding and additional debt.

Water Revenue Bonds

Moody's Aa1 S&P AAA Fitch AA+

Purpose

- The District issues Bonds to either refund outstanding Bonds or to fund its on-going capital improvement program in the District's service area, which comprises approximately 5,200 square miles including portions of the counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura.

Security

- The Bonds are secured by the District's pledge of Net Operating Revenues. Net Operating Revenues are revenues received by the District from charges for the sale or availability of water after payment of Operation and Maintenance Expenditures.

Rate Covenant

- The District will set rates such that Net Operating Revenues, together with any Additional Revenues, will be at least sufficient to pay: interest on and principal of the Outstanding Bonds and Parity Obligations.

Bonds Outstanding

- \$4.3 billion as of June 30, 2017

Water Revenue Bonds (cont.)

Moody's Aa1 S&P AAA Fitch AA+

Debt Service Reserve Fund

- An amount equal to 50% of the lesser of: MADS, 125% of AADS; and 10% of proceeds of the 2008 Bonds.

Anticipated Borrowings

- None specified.

Additional Bonds Test

- The District may issue Refunding Bonds or Parity Obligations if: (1) either the Net Operating Revenues for any 12 consecutive month period within the last completed 24-month period or the estimated Net Operating Revenues for the first completed fiscal year shall be at least 1.2x MADS in any Fiscal Year; (2) the amount of outstanding Bonds and other indebtedness may not exceed 15% of the assessed value of all taxable property within the District; and (3) the amount of net assets of the District at the end of the last fiscal year prior to the issuance equals at least 100% of the aggregate amount of water revenue Bonds outstanding.

Sacramento County Sanitation Districts Financing Authority

Revenue Bonds

Moody's Aa2 S&P AA+ Fitch AA+

Purpose

- Bond proceeds were used primarily to finance or reimburse the costs of the acquisition and construction of certain improvements to the Sanitation System.

Security

- The Bonds are secured by a senior lien on Authority Revenues. All Authority Revenues received by the Authority are assigned to the Trustee for the benefit of the registered owners of the Bonds, and are irrevocably pledged to the payment of the interest on and principal of and redemption premium.

Rate Covenant

- The Authority shall set rates whereby the Adjusted Annual Net Revenues for such Fiscal Year will equal at least: (1) 120% of debt service for senior Bonds; (2) 110% of debt service for senior an subordinate Bonds; and (3) 100% of all obligations of the District payable in such Fiscal Year.

Bonds Outstanding

- Senior: \$1.1 billion as of June 30, 2017
- Subordinate: \$300 million as of June 30, 2017

Debt Service Reserve Fund

- An amount equal to 50% of MADS.

Additional Borrowings

- None specified.

Additional Bonds Test

- Additional parity Bonds may be issued if either the Adjusted Annual Net Revenues during the last audited 12 month period during the immediately preceding 18 month period, or the next five Fiscal Years will be at least equal to: (1) 120% of debt service for senior Bonds; (2) 110% of debt service for senior an subordinate Bonds; and (3) 100% of all obligations of the District payable in such Fiscal Year.

Sacramento Municipal Utility District

Electric Revenue Bonds

Moody's Aa3 S&P AA Fitch AA

Purpose

- Bond proceeds were used to finance new capital improvements and additions to the District's electric system and acquisitions of natural gas reserves, refund certain outstanding Bonds and commercial paper notes, and pay costs of issuance.

Security

- The Bonds are secured by a pledge of the Net Revenues of the Electric System of the District.
- The Subordinated Bonds are payable from the Net Subordinate Revenues of the Electric System.

Rate Covenant

- The District shall maintain and collect rates such that Net Revenues will provide at least 1.2 times debt service plus any sinking fund or reserve fund payments.

Bonds Outstanding

- Senior: \$1.8 billion as of December 31, 2017

Debt Service Reserve Fund

- Varies by series.

Additional Bonds Test

- Additional Bonds may be issued if: for a period of 12 consecutive months during the 24 months preceding the issuance of additional Bonds, Net Revenues will be at least 1.25x debt service of all Bonds and Parity Bonds. Net Revenues can be adjusted to include 75% of the estimated additional Net Revenues derived from an increase in rates.

Sacramento Municipal Utility District

Electric Revenue Bonds (cont.)

Moody's Aa3 S&P AA Fitch AA

Debt Service Reserve Fund

- The amount in the combined reserve funds of the Bonds then outstanding will at no time be less than the current annual interest requirements on all outstanding Bonds. If the District's debt service ratio in any fiscal year shall fall below 1.40x, there shall be set aside in the reserve funds from the first available Net Revenues not less than 15% of the total current monthly interest requirement until the ratio again exceeds 1.40x or until the aggregate amount on deposit is equal to MADS.

Additional Bonds Test

- Additional revenue Bonds may be issued if: Net Revenues will be sufficient to pay the principal of and interest on all Bonds and Parity Bonds then outstanding and on such additional revenue Bonds and for a period of 12 months during 24 months preceding the issuance of additional Bonds, the Net Revenues have been at least equal to 1.25 times MADS on all Bonds outstanding and additional Bonds after adjustments to net revenues.

Additional Borrowings

- The District expects to finance \$940 million of its 2018-2022 capital program with debt.

Certificates of Participation

Moody's Aa1 S&P AA+ Fitch AA+

Purpose

- Bond proceeds were used primarily to finance the acquisition, construction and installation for certain public facilities and capital projects of the County.

Debt Service Reserve Fund

- An amount equal to the lesser of: the MADS for all future Lease Years, beginning the Lease Year in which the calculation is made; 10% of proceeds; or 125% of the average of the Annual Debt Service for all Lease Years, including the Lease Year in which the calculation is made. The 2006 Certificates were funded with a Reserve Fund Credit Facility. Reserve Fund Credit Facility is a letter or line of credit, surety bond, insurance policy, or a similar facility in the Reserve Fund in lieu of or in a partial substitution of cash or securities.

Security

- The Bonds are secured by Base Rental Payments and Additional Rental made by the County with respect to each of the Properties, in the amounts, at the times, and in the manner set forth in the Subleases. The County has covenanted in the Subleases to take such action necessary to include all Base Rental Payments and Additional Rental due in its operating budget for each fiscal year, and to make all necessary appropriations for such Base Rental Payments and Additional Rental. The County is not obligated to pay Rental Payments. The Rental Payments are subject to abatement risk.

Bonds Outstanding

- \$294 million as of June 30, 2017

Additional Borrowings

- None specified.

Taxable Pension Obligation Bonds

Moody's Aa2 S&P AAA Fitch AA+

Purpose

- Bond proceeds were used to finance a portion of the county's unfunded accrued pension liability and to refund the County's Pension Obligation Debenture.

Tax Status

- Interest on the Bonds is not excludable from federal income taxes but is exempt from the State of California's personal income taxes.

Additional Borrowings

- None specified.

Security

- The Bonds are absolute and unconditional obligation of the County imposed by the County Employees Retirement Law of 1937. In the event the County fails to make appropriations, the County Controller will be obligated to pay the Bonds from any money available in any fund in the County Treasury.

Bonds Outstanding

- \$605 million as of June 30, 2017

General Obligation Bonds

Moody's Aaa S&P AA+ Fitch AA+

Purpose

- Bond proceeds were used to fund capital improvement programs and refund a portion of certain outstanding GO Bonds of the City.

Security

- The Bonds are secured by the Board's power to levy ad valorem taxes without limitation as to rate or amount upon all property subject to taxation by the City.

Additional Borrowings

- None specified.

Bonds Outstanding

- \$2.1 billion as of June 30, 2017

Second Series Revenue Bonds

Moody's A1 S&P A+ Fitch A+

Purpose

- Bond proceeds were used to finance and refinance a portion of the architectural, engineering and construction costs of the Airport's capital program.

Security

- The Bonds are secured by a pledge of, lien on and security interest in Net Revenues of the Airport, the funds and accounts provided in the 1991 Master Resolution and passenger facility charges to the extent designated as revenue by the Commission.

Rate Covenant

- The Commission shall set rates so that Net Revenues will be at least sufficient to make all required debt service payments related to the Airport and other required payments to be made to the city. Net Revenues and any Transfers from the Contingency Account will be at least equal to 125% of aggregate ADS with respect to Bonds for such Fiscal Year.

Bonds Outstanding

- \$4.7 billion as of June 30, 2017

Second Series Revenue Bonds (cont.)

Moody's A1 S&P A+ Fitch A+

Debt Service Reserve Fund

- The reserve requirement for the Participating Series Reserve Account is an amount equal to MADS.

Additional Borrowings

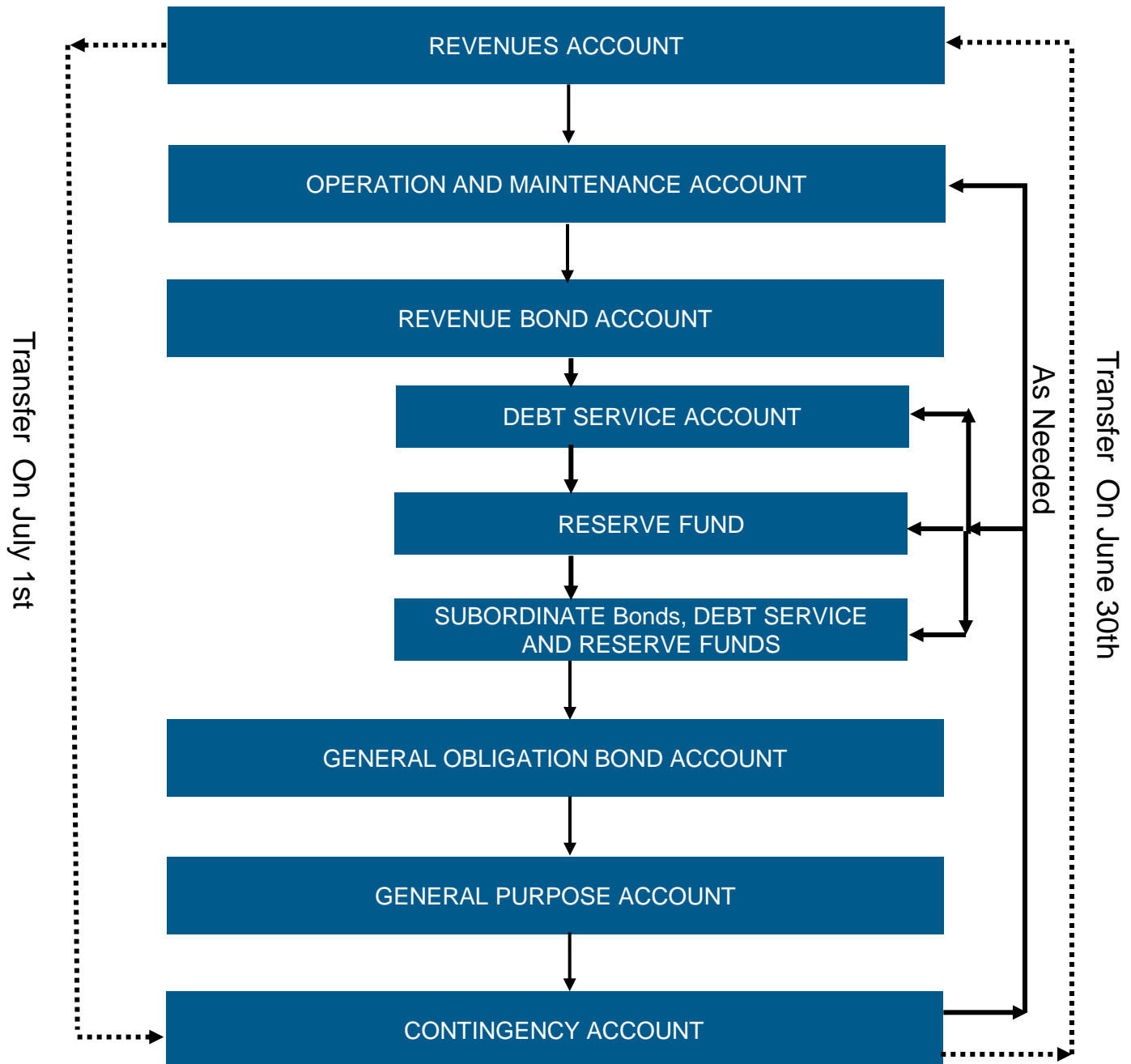
- The Commission's 2018-2022 capital program includes \$4.8 billion of new debt.

Additional Bonds Test

- Additional Bonds may be issued if:
(1) for the period from and including the first full Fiscal Year following the issuance of the Additional Bonds and including the last Fiscal year during which any interest on such Bonds are expected to be paid, projected Net Revenues will be at least equal to 1.25 times ADS, and for the period from and including the first full Fiscal Year following the issuance of the Additional Bonds and including the later of: the fifth full Fiscal Year after the issuance or the third full Fiscal Year during which no interest is expected to be paid, projected Net Revenues will be sufficient to satisfy the rate covenant in the 1991 Master Resolution; or (2) Net Revenues in the most recently completed Fiscal Year will be at least equal to 125% ADS, plus MADS on the Bonds proposed to be issued.

Airport Commission City and County of San Francisco

Second Series Revenue Bonds Flow of Funds



Source: Official Statement

Public Utilities Commission of the City and County of San Francisco

Water Revenue Bonds

Moody's Aa3 S&P AA- Fitch NR

Purpose

- Bond proceeds were used to refund a portion of a water revenue bond previously issued by the Commission to finance and refinance the reconstruction and improvements of the water supply, storage and distribution system facilities.

Security

- The Bonds are secured by Net Revenues of the Commission's Water Enterprise.

Rate Covenant

- The Commission shall collect rates equal to at least 1.25 times the Annual Debt Service.

Bonds Outstanding

- \$4.2 billion as of June 30, 2017

Debt Service Reserve Fund

- Each series of Bonds require maintenance of a separate Debt Service Reserve Fund and the funding requirement varies with each series of Bonds.

Additional Bonds Test

- Additional series of Bonds secured by Revenues on parity with the Outstanding Bonds may be issued if: Net Revenues for any period of 12 consecutive months out of the 18 months preceding the authentication and delivery of the Additional Series of Bond; and the Annual Debt Service for such period equals at least 1.25 times the Annual Debt Service.

Additional Borrowings

- The Commission expects to issue between \$63 million and \$410 million of new debt annually for its 2018-2022 capital program.

Toll Bridge Revenue Bonds

Senior:	Moody's Aa3	S&P AA	Fitch AA
Subordinate:	Moody's A1	S&P AA-	Fitch AA-

Purpose

- Bond proceeds were used to finance the cost of the design and construction of eligible projects of Regional Measure 1, Regional Measure 2, and the Seismic Retrofit projects for the Bay Area Bridges.

Rate Covenant

- Senior: BATA has covenanted to maintain toll revenue at levels that result in net operating revenue greater than 1.2x annual debt service. In addition, BATA has agreed to maintain tolls at a level where net operating revenue plus the balance in the operations and maintenance reserve is at least 1.25x total fixed costs, as well as maintaining tolls at levels exceeding 1.0x all fixed costs.
- Subordinate: BATA has covenanted to maintain toll revenue at levels that result in operating revenue greater than 1.2x annual debt service costs.

Debt Service Reserve Fund

- Senior: An amount equal to the lesser of MADS, 10% of sale proceeds, or 125% of average annual Debt Service.
- Subordinate: An amount equal to maximum annual interest.

Security

- The senior Bonds are secured by a first lien on all revenues of BATA, after a provision for Caltrans costs for operations and maintenance of toll facilities, including the San Francisco-Oakland Bay Bridge, San Mateo-Hayward Bridge; Dumbarton Bridge; Antioch Bridge; Benicia-Martinez Bridge; Carquinez Bridge and Richmond-San Rafael Bridge. The subordinate Bonds have a junior claim on Pledged Revenues.

Bonds Outstanding

- Senior: \$5.8 billion as of June 30, 2017
- Subordinate: \$3.6 billion as of June 30, 2017

Additional Bonds Test

- Senior: No additional Bonds shall be issued, unless Net Revenue equates to greater than 150% of MADS on all outstanding parity Bonds.
- Subordinate: No additional Bonds shall be issued unless Available Revenue equates to greater than 120% of MADS on all outstanding parity Bonds.

Additional Borrowings

- None specified.

San Francisco Bay Area Rapid Transit District

General Obligation Bonds

Moody's Aaa S&P AAA Fitch NR

Purpose

- Bond proceeds were used primarily to fund seismic upgrades to the transit system.

Security

- The Bonds are secured by the District's power to levy ad valorem taxes without limitation as to rate or amount upon all property subject to taxation in the counties of Alameda, Contra Costa, and San Francisco.

Additional Borrowings

- None specified.

Bonds Outstanding

- \$891 million as of June 30, 2017

San Francisco Bay Area Rapid Transit District

Sales Tax Revenue Bonds

Moody's NR S&P AA+ Fitch AA+

Purpose

- Bond proceeds were used to fund various public transit projects and improvements.

Debt Service Reserve Fund

- An amount equal to the lesser of MADS, 10% of sale proceeds, or 125% of average annual Debt Service.

Additional Bonds Test

- Sales Tax Revenues for any period of 12 consecutive months during the immediately preceding 18 months are at least equal to 1.5x the MADS
- Sales Tax Revenues estimated by the District for the Fiscal Year in which the additional Bonds are to be issued and for each of the next succeeding four Fiscal Years will equal at least 1.5x the amount of Annual Debt Service on all Bonds, including the Bonds to be issued.

Security

- The Bonds are secured by 75% of a ½ cent sales tax assessed in the District's three-county service area (San Francisco, Alameda and Contra Costa Counties).
- Legal provisions also provide for sales tax revenues to be remitted directly to the trustee.

Bonds Outstanding

- \$595 million as of June 30, 2017

Southern California Public Power Authority

Canyon Power Project Revenue Bonds

Moody's Aa3 S&P AA- Fitch AA-

Purpose

- The Bonds retired the Authority's outstanding 2009 Revenue Notes, which were issued to fund the Canyon Power Project. The Project involved the construction of a natural gas fired electric generating plant.

Rate Covenant

- The Authority shall establish rates each Fiscal Year to provide Revenues at least sufficient for the payment of debt service and other payments required by the Indenture.

Debt Service Reserve Fund

- An amount equal to the lesser of MADS, 10% of sale proceeds, or 125% of average annual Debt Service.

Additional Borrowings

- None specified.

Security

- The Bonds are secured by revenues derived from a take-or-pay contract with the City of Anaheim. The payment obligation constitutes an operating expense of the City and is payable from its electric system revenues.

Bonds Outstanding

- \$345 million as of June 30, 2017

Southern California Public Power Authority

Subordinate Transmission Project Revenue Bonds

Moody's Aa3 S&P AA- Fitch AA

Purpose

- Senior Bonds were used to finance or refinance the acquisition and construction of a 488 mile in length transmission line from Millard County, Utah to Adelanto, CA and the acquisition of the entitlements to the capability of the Southern Transmission Project from the Department and the cities of Anaheim, Riverside, Pasadena, Burbank, and Glendale.

Rate Covenant

- The Authority shall establish rates, each Fiscal Year, to provide Revenues together with other available funds, to make senior and subordinate debt service payments as well as required payments of each respective indentures.

Debt Service Reserve Fund

- Varies by series.

Additional Borrowings

- None specified.

Security

- The Bonds are secured by pledged revenues derived by the Authority from the contracts with the Project Participants.
- Currently, there are no Senior Bonds Outstanding.
- The Authority consists of 12 cities and one irrigation district located in California. The following municipal utilities are significant members of the Authority; LA DEWAP, Anaheim and Riverside.
- The Authority and each Project Participant have entered into a Transmission Service Contract, whereby the Project Participants are obligated to make payments on a take-or-pay basis. Their payments are payable solely from their respective electric system revenues.

Bonds Outstanding

- \$590 million as of June 30, 2017

Southern California Public Power Authority

Milford Wind Corridor Phase 1 Project Revenue Bonds

Moody's Aa3 S&P AA- Fitch NR

Purpose

- The Bonds financed the prepayment by the Authority of the purchase of energy from a wind farm over the 20-year delivery term of the Power Purchase Agreement. The Agreement is with Milford Wind LLC.

Rate Covenant

- The Authority shall establish rates each Fiscal Year to provide Revenues at least sufficient for the payment of debt service and other payments required by the Indenture.

Debt Service Reserve Fund

- An amount equal to the lesser of MADS, 10% of sale proceeds, or 125% of average annual Debt Service.

Additional Borrowings

- None specified.

Bonds Outstanding

- \$193 million as of June 30, 2017

Security

- The Bonds are secured by revenues derived from take-or-pay contracts with the Project Participants. With regard to this project, the Project Participants are Los Angeles Department of Water and Power (LADWP), and the cities of Burbank and Pasadena, although LADWP is the major Project Participant with 92.5% of the total project. Each Participant is obligated in their respective capacity and energy on a take-or-pay basis. The payment obligation constitutes an operating expense of the respective Purchasers and is payable from their respective electric system revenues. A failure to make payments by one Purchaser would likely result in larger payments by other Purchasers.
- The performance of Milford Wind LLC under the Power Purchase Agreement is secured by a deed of trust against the facility with the Authority as beneficiary.
- The amount of the security interest is equal to the amount required to liquidate the Power Purchase Agreement in the case of a default of the seller. Should Milford Wind LLC default on its obligations to deliver energy, the Authority can terminate the agreement and foreclose on the deed of trust and take over the operation of the facility.

Southern California Public Power Authority

Windy Point/Windy Flats Project Revenue Bonds

Moody's NR S&P AA Fitch AA

Purpose

- The Bonds financed the prepayment by the Authority of the purchase of energy from a wind farm over the 20-year delivery term of the Power Purchase Agreement. The Agreement is with Windy Flats Partners LLC.

Rate Covenant

- The Authority shall establish rates each Fiscal Year to provide Revenues at least sufficient for the payment of debt service and other payments required by the Indenture.

Debt Service Reserve Fund

- An amount equal to the lesser of MADS, 10% of sale proceeds, or 125% of average annual Debt Service.

Additional Borrowings

- None specified.

Bonds Outstanding

- \$433 million as of June 30, 2017

Security

- The Bonds are secured by revenues derived from take-or-pay contracts with the Project Participants. With regard to this project, the Project Participants are Los Angeles Department of Water and Power (LADWP), and the City of Glendale, although under an agreement between the Participants, LADWP will assume Glendale's rights and obligations. LADWP is thus obligated for 100% of the energy on a take-or-pay basis. The payment obligation constitutes an operating expense of LADWP and is payable from its electric system revenues.
- The performance of Windy Flats Partners LLC under the Power Purchase Agreement is secured by a deed of trust against the facility with the Authority as beneficiary.
- The amount of the security interest is equal to the amount required to liquidate the Power Purchase Agreement in the case of a default of the seller. Should Windy Flats Partners LLC default on its obligations to deliver energy, the Authority can terminate the agreement and foreclose on the deed of trust and take over the operation of the facility.

Cedars Sinai Medical Center Revenue Bonds

Moody's Aa3 S&P NR Fitch AA-

Purpose

- Bond proceeds were loaned to the Corporation to fund the acquisition of certain equipment and activities relating to the construction, remodeling and refurbishment of the Corporation's facilities and the facilities of the Cedars-Sinai Medical Care Foundation.

Security

- The Bonds are secured by Gross Revenues of the Obligated Group. Gross Revenues will be deposited in the Gross Revenue Fund until the amount is sufficient to pay all Required Payments.

Rate Covenant

- The Annual Required Debt Service Coverage shall be at least 1.10x.

Bonds Outstanding

- \$1.3 billion as of June 30, 2017

Additional Borrowings

- None specified.

Important information about this report:

This guide is for informational purposes only and should not be construed as a solicitation or an offer to buy or sell any security. The information presented in this guide has been obtained from sources believed to be reliable, but FCM does not make any representation about the accuracy, completeness, or timeliness of this information. This guide is current only as of the date that it was published, and opinions, estimates, and other information may change without notice or publication. Past performance is no guarantee of future results. Prior to making an investment or other financial decision, please consult the financial, legal, and/or tax advisor of your choice. FCM shall not be liable for any person's use of this guide. FCM does not give tax or legal advice.

In general, the bond market is volatile, and bond prices rise when interest rates fall and vice versa. This effect is usually pronounced for longer-term securities.

Any fixed income security sold or redeemed prior to maturity may be subject to a substantial gain or loss.

Diversification does not ensure a profit or guarantee against a loss. The municipal market is volatile and can be significantly affected by adverse tax, legislative or political changes and the financial condition of the issuers of municipal securities. Interest rate increases can cause the price of a debt security to decrease. A portion of the dividends you receive may be subject to federal, state, or local income tax or may be subject to the federal alternative minimum tax.

Investing in municipal bonds for the purpose of generating tax-exempt income is generally more beneficial the higher an investor's tax bracket. Tax-advantaged accounts such as IRAs and 401(k)s are generally not appropriate for holding tax-exempt municipal securities.

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