

CALIFORNIA BONDS: 101

A Citizen's Guide to General Obligation Bonds

2016 EDITION

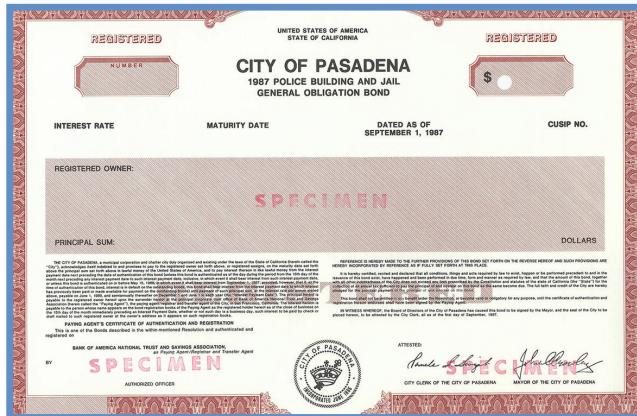


JOHN CHIANG
CALIFORNIA STATE TREASURER

SECTION 1 | BONDS 101: Q&A

Q. What is a municipal bond?

A. A bond is a loan. There are many types of municipal bonds, but they have only one purpose – to borrow money. It involves a promise to pay money, with interest, on a specified date.



Q. Who uses them?

A. The state and many local governments, especially school districts.

Q. What types of municipal bonds are there?

A. The two types most pertinent to public finance are revenue bonds and general obligation (GO) bonds. To repay investors, revenue bonds rely on monies derived from the sale of commodities (such as water) or from the use of facilities (such as airports).

State general obligation bonds enjoy the “full faith and credit” of California. “Full faith and credit” expresses the commitment of the issuer to repay the bonds from all legally available funds. GO bonds issued by local governments, such as schools, are often only payable from the local issuer’s property taxes.

This guide will focus on general obligation bonds. Future publications will address other forms of government debt.

Q. Do GO bonds require voter approval?

A. Yes. State GO bonds require majority voter approval. Locally issued GO bonds require 2/3 voter approval. However, GO bonds by schools can be issued with 55% voter approval if certain statutory requirements are met.

Q. What are GO bonds used for?

A. They are primarily used to finance infrastructure projects, including roads, bridges, water and sewer facilities, levees, K-14 schools, public universities and other critical public works projects.

Q. How do bonds differ from a loan?

A. The capital market has a different set of expectations than bank lenders have. Primarily, these expectations relate to the certainty of repayment, a more limited tolerance for variances in financial condition, and the size of the loan.

Also, publicly offered bonds are subject to federal securities fraud laws and require a very high level of caution about what is disclosed and when it is disclosed.

Q. What is the total amount of outstanding State of California issued GO bonds?

A. \$74.9 Billion**

Q. What is the total amount of State of California GO bonds authorized but not yet issued?

A. \$27.6 Billion**

SECTION 2 | THE RATINGS GAME

A bond credit rating is similar to an individual's credit score. The better the credit rating, the cheaper the borrowing cost.

	Moody's	Standard & Poor's	Fitch	The Ratings Map
Investment Grade	Aaa	AAA	AAA	High Grade
	Aa1	AA+	AA+	
	Aa2	AA	AA	
	Aa3	AA-	AA-	
Upper Medium Grade	A1	A+	A+	Upper Medium Grade
	A2	A	A	
	A3	A-	A-	
	Baa1	BBB+	BBB+	
Lower Medium Grade	Baa2	BBB	BBB	Lower Medium Grade
	Baa3	BBB-	BBB-	
Non-Investment Grade	Ba1	BB+	BB+	Speculative
	Ba2	BB	BB	
	Ba3	BB-	BB-	
	B1	B+	B+	
Highly Speculative	B2	B	B	Highly Speculative
	B3	B-	B-	
	Caa1	CCC+	CCC	
	Caa2	CCC		
Substantial Risks	Caa3	CCC-		Substantial Risks
	Ca	CC		
		D	DDD	
Extremely Speculative			DD	Extremely Speculative
			D	
Default				Default

California's credit rating has improved dramatically since the Great Recession. On August 12, 2016, Fitch Ratings upgraded California's GO credit rating one notch to AA-, elevating the state to the "high grade" category. Moody's and S&P have maintained their Aa3 and AA- ratings respectively.

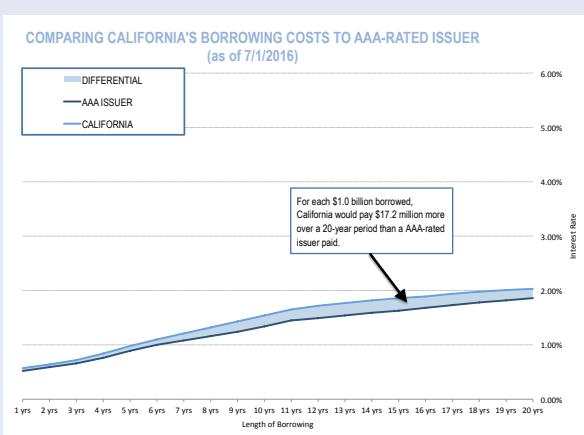
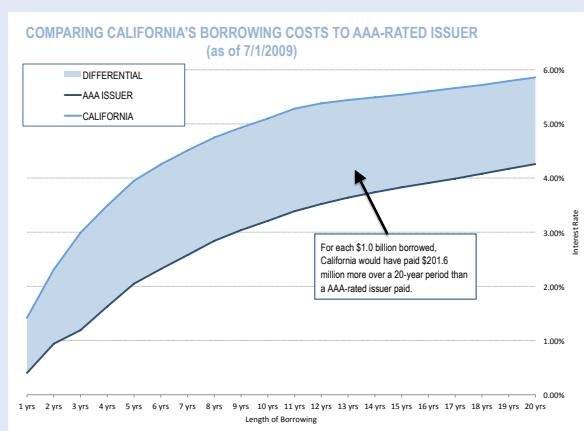
	Moody's	Standard & Poor's	Fitch
Current	Aa3	AA-	AA-
2009	Baa1*	A**	BBB*

*Credit rating as of July 2009

**Credit rating as of February 2009

Higher credit ratings produce lower borrowing costs and taxpayer savings.

For example, the next two charts demonstrate how much taxpayers can save when ratings go up.



COST TO CA COMPARED TO AAA-RATED ISSUER:
Then - \$201.6 Million • Now - \$12.2 Million

Savings = \$189.4 Million Per \$1 Billion Borrowed

Three Major Factors Rating Agencies Review When Grading California's Credit Worthiness

Economy

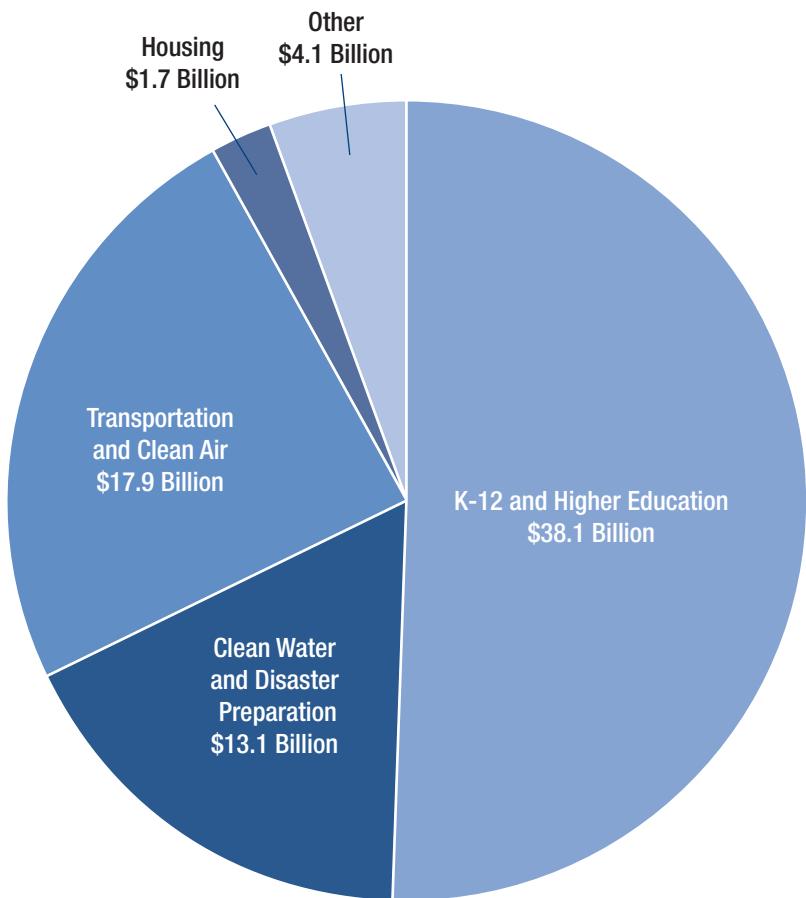
Financial Operations and Results

Management

SECTION 3 | DEBT: WHAT IS IT USED FOR?

State of California's Long-Term General Obligation Bonds Outstanding

A breakdown of how proceeds of the state's \$74.9 Billion* in outstanding long-term general obligation bonds were used:



*As of June 30, 2016

SECTION 4 | MEASURING CALIFORNIA'S DEBT BURDEN

Measuring California's debt level using various ratios provides a way to compare and understand the state's debt burden for tax supported and general obligation debt. Three commonly used ratios are: debt as a percentage of the state's GDP; debt as percentage of personal income; and debt per capita.



Debt as Percentage of State GDP*

(Figure compares what an issuer, in this case the State of California, owes versus what it produces. Figures as of end of calendar year 2014.)



Debt as Percentage of Personal Income*

(Figure is based on level of debt to the total personal income of its residents. Personal income includes wages, business income, interest and dividends and governmental transfers like Social Security.)



\$2,323

Debt Per Capita*

(Figure is based on residents' average share of state's total outstanding debt.)

*Figures as reported by Moody's in its 2016 State Debt Medians Report released May 2016.
As of end of calendar year 2014.

Here's How California Ranks Among the 10 Most Populous States

Debt to Personal Income

STATE	MOODY'S/S&P/FITCH	DEBT TO PERSONAL INCOME*
Texas	Aaa/AAA/AAA	0.90%
North Carolina	Aaa/AAA/AAA	1.80%
Michigan	Aa1/AA-/AA	1.80%
Florida	Aa1/AAA/AAA	2.50%
Pennsylvania	Aa3/AA-/AA-	2.50%
Ohio	Aa1//AA+/AA+	2.60%
Georgia	Aaa/AAA/AAA	2.70%
California	Aa3/AA-/AA-	4.70%
Illinois	Baa2/BBB+/BBB+	5.20%
New York	Aa1/AA+/AA+	5.40%
Moody's Median All States		2.50%
Median for the 10 Most Populous States		2.55%

Debt to Capita

STATE	MOODY'S/S&P/FITCH	DEBT TO CAPITA*
Texas	Aaa/AAA/AAA	\$383
North Carolina	Aaa/AAA/AAA	\$721
Michigan	Aa1/AA-/AA	\$719
Georgia	Aaa/AAA/AAA	\$1,029
Florida	Aa1/AAA/AAA	\$1,038
Ohio	Aa1//AA+/AA+	\$1,091
Pennsylvania	Aa3/AA-/AA-	\$1,172
California	Aa3/AA-/AA-	\$2,323
Illinois	Baa2/BBB+/BBB+	\$2,522
New York	Aa1/AA+/AA+	\$3,021
Moody's Median All States		\$1,025
Median for the 10 Most Populous States		\$1,065

Debt As % of GDP

STATE	MOODY'S/S&P/FITCH	DEBT AS % OF STATE GDP*
Texas	Aaa/AAA/AAA	0.64%
North Carolina	Aaa/AAA/AAA	1.50%
Michigan	Aa1/AA-/AA	1.59%
Ohio	Aa1//AA+/AA+	2.20%
Georgia	Aaa/AAA/AAA	2.21%
Pennsylvania	Aa3/AA-/AA-	2.28%
Florida	Aa1/AAA/AAA	2.51%
California	Aa3/AA-/AA-	3.94%
New York	Aa1/AA+/AA+	4.29%
Illinois	Baa2/BBB+/BBB+	4.41%
Moody's Median All States		2.21%
Median for the 10 Most Populous States		2.25%

*Moody's, S&P and Fitch ratings as of August 2016.

SECTION 5 | DEBT BURDEN COMPARED TO BUDGETARY REVENUES & SPENDING

Other useful ways to measure debt burden is to compare it against General Fund revenues and other budgetary spending.



6.54%

Debt Service as Percentage
of General Fund Revenues

(Figure is based on \$7.7 billion in debt service payments versus \$117 billion of General Fund revenues in 2015-16.)



**\$7.7
BILLION**

Debt Service Payments

Debt Service Vs. Other Budgetary Spending



\$51*
BILLION

K-12 Education



\$14*
BILLION

Higher Education



\$11*
BILLION

Public Safety



\$33*
BILLION

Health and Human Services

SECTION 6 | CALIFORNIA REFINANCING: HOW MUCH HAS BEEN SAVED

Just as a homeowner can refinance his or her mortgage when interest rates fall, the Treasurer refinances portions of the state debt in a similar way in order to reduce costs to taxpayers.



\$4.2 Billion
In Savings from Bond Refinancings Conducted
by Treasurer Chiang since January 2015*

THAT COULD PAY TUITION AND FEES FOR ONE YEAR FOR APPROXIMATELY



311,111
Incoming Freshmen at University of California
Campuses for 2016-2017**

**SAVINGS DUE TO DEBT
REFINANCINGS SINCE
JANUARY 2015**



Lease
Revenue Bond
Savings -
\$200 Million

All other
Savings -
\$1.9 billion

GO Bond
Savings:
\$2.1 Billion

*As of September 1, 2016

**Based on the average tuition and fees (\$13,500) for the 2016-17 school year at UC campuses.

SECTION 7 | CALIFORNIA'S BOND CALENDAR

California's general obligation bond sales generally take place three to four times a year, generally two sales each during the respective three to four months after the governor's January budget release and after a budget is approved and signed in June.

California State Treasurer Chiang Sells:

MARCH 2016

\$2.9
Billion in Bonds

APRIL 2016

\$1.5
Billion in Bonds

AUGUST 2016

\$2.7
Billion in Bonds

For more information on California's debt investment,
visit the Treasurer's award-winning DebtWatch website

debtwatch.treasurer.ca.gov



JOHN CHIANG | CALIFORNIA STATE TREASURER

915 Capitol Mall, Room 110
Sacramento, California 95814
(916) 653-2995
WWW.TREASURER.CA.GOV