

CALIFORNIA BONDS: 101

A Citizen's Guide to State Revenue Bonds

2017 EDITION



JOHN CHIANG | CALIFORNIA STATE TREASURER

REVENUE 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 special districts that provide commodities, such as water and electricity.

Q. WHAT TYPES OF MUNICIPAL BONDS ARE THERE?

- A.** There are two types most pertinent to public finance – general obligation bonds and revenue bonds. This guide will focus on revenue bonds. Go to treasurer.ca.gov/publications to download our previous guide on general obligation bonds.

Q. WHAT IS A REVENUE BOND?

- A.** Revenue bonds finance projects such as hospitals, airports, toll roads, education facilities and bridges. Generally, revenues from those projects repay the interest and principal of the issued bonds over time. For example, a bridge financed by revenue bonds has a toll paid by motorists each time they cross the bridge. Revenues from the toll are used to pay back investors who purchased the bonds used to finance construction of the bridge.

Q. WHAT IS THE SECURITY FOR A REVENUE BOND?

- A.** Generally, revenue bonds are backed by the money generated by the project that was funded by the bond issue.

Q. DO REVENUE BONDS REQUIRE VOTER APPROVAL?

A. No.

Q. HOW DO REVENUE BONDS DIFFER FROM GENERAL OBLIGATION BONDS?

A. Revenue bonds are backed by a specific revenue stream and, unlike general obligation bonds, are not backed by the “full faith and credit of the state” nor are they backed by tax receipts. “Full faith and credit” expresses the commitment of the issuer to repay the bonds from all legally available funds.

Q. WHAT IS THE TOTAL AMOUNT OF OUTSTANDING STATE OF CALIFORNIA AGENCY ISSUED REVENUE BONDS?

A. \$43.3 billion as of June 30, 2017. (Source: State Treasurer’s Office)

Q. WHAT IS A LEASE REVENUE BOND?

A. Lease revenue bonds (LRBs) are a type of revenue bond. Lease revenue bonds usually finance the construction of facilities, including state office buildings, correction facilities, courthouses, and state fire facilities. However, unlike revenue bonds that use money generated by the project (a bridge toll) to repay investors, lease revenue bonds have a lessee (government agency) that pays rent to use the facility. The rent payments are used to pay back investors who purchased the bonds used to finance the construction of the facility.

Q. WHAT IS THE SECURITY FOR LEASE REVENUE BONDS?

A. LRBs are secured by lease payments made by the party leasing the facility (school or office building) that was funded by the bond issue. The State Public Works Board (SPWB) generally issues LRBs for the state, constructs the facility, and leases the facility to the governmental agency user until the bonds are paid in full.

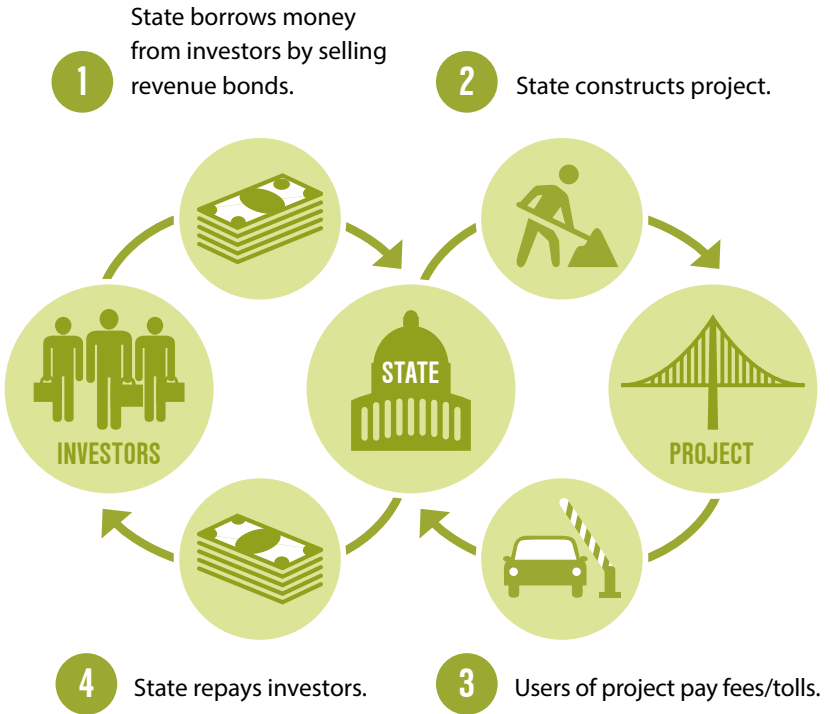
Q. DO LEASE REVENUE BONDS REQUIRE VOTER APPROVAL?

A. No.



HOW A STATE AGENCY USES REVENUE BONDS

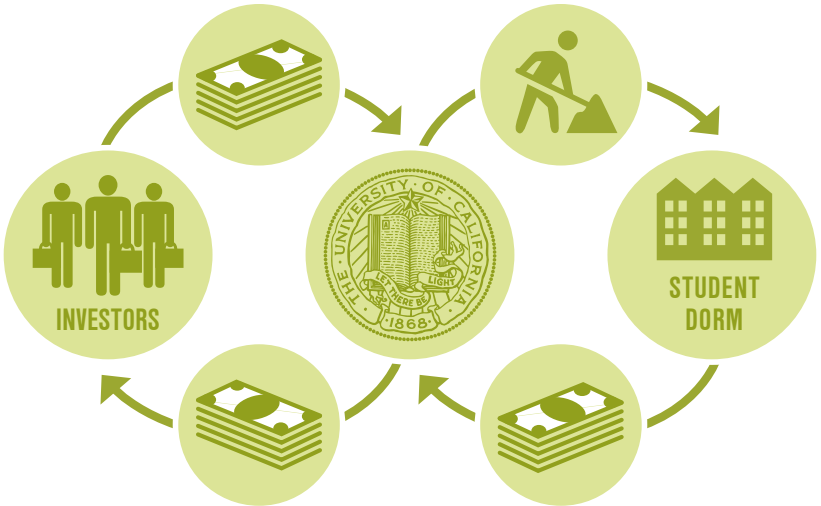
HOW A STATE REVENUE BOND WORKS



HOW THE UNIVERSITY OF CALIFORNIA USES REVENUE BONDS

1 UC Regents borrow money from investors by selling revenue bonds.

2 UC uses money from bond sales to construct new student dormitory.



4 UC pays back investors.

3 UC generates money from students paying tuition and room and board.

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.

SAVINGS DUE TO DEBT
REFINANCINGS SINCE
JANUARY 2015*:



GO BOND
SAVINGS:
\$3.4 billion

ALL OTHER
SAVINGS:
\$2.1 billion

LEASE
REVENUE BOND
SAVINGS:
\$430 million

\$6 BILLION =**

TOTAL SAVINGS FROM BOND
REFINANCINGS CONDUCTED BY TREASURER
CHIANG SINCE JANUARY 2015*



THAT COULD PAY FOR THE AVERAGE
ANNUAL YEARLY MEAN WAGE OF

62,073

POLICE OFFICERS

(ANNUAL MEAN WAGE FOR CALIFORNIA POLICE
AND SHERIFF'S PATROL OFFICERS IS \$96,660)***

*As of September 1, 2017.

**The \$6 billion in savings due to refinancing is over the life of the bonds.

***Source: Bureau of Labor Statistics, Occupational Employment and Wages, May 2016.

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. Revenue bonds used by state agencies have credit ratings that fall somewhere within the investment grade categories listed on this chart.

	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-	
	A1	A+	A+	Upper Medium Grade
	A2	A	A	
	A3	A-	A-	
	Baa1	BBB+	BBB+	Lower Medium Grade
	Baa2	BBB	BBB	
	Baa3	BBB-	BBB-	
NON-INVESTMENT GRADE	Ba1	BB+	BB+	Speculative
	Ba2	BB	BB	
	Ba3	BB-	BB-	
	B1	B+	B+	Highly Speculative
	B2	B	B	
	B3	B-	B-	
	Caa1	CCC+	CCC	Substantial Risks
	Caa2	CCC		Extremely Speculative
	Caa3	CCC-		Default
	Ca	CC		
	D	DDD		
		DD		
		D		

THREE MAJOR FACTORS RATING AGENCIES REVIEW WHEN GRADING CALIFORNIA'S CREDIT WORTHINESS:

ECONOMY

FINANCIAL OPERATIONS
AND RESULTS

MANAGEMENT

STATE AGENCIES THAT ARE THE MOST COMMON USERS OF REVENUE BONDS

CALIFORNIA EARTHQUAKE AUTHORITY



PURPOSE OF BONDS:

The California Earthquake Authority (CEA) issues revenue bonds in order to enhance their ability to pay insurance claims. The agency provides residential earthquake insurance and must maintain a certain level of capital in order to preserve the ability to pay out customer claims if required.

TOTAL REVENUE BONDS OUTSTANDING*:

\$310 million

RATINGS:

Moody's: A3 / S&P: NR / Fitch: A

CALIFORNIA INFRASTRUCTURE AND ECONOMIC DEVELOPMENT BANK (IBANK) - ISRF BONDS



PURPOSE OF BONDS:

The California Infrastructure State Revolving Fund program provides financing to public agencies and nonprofit corporations for infrastructure and economic development projects.

TOTAL REVENUE BONDS OUTSTANDING*:

\$312 million

RATINGS:

Moody's: Aaa / S&P: AAA / Fitch: AAA

CALIFORNIA HOUSING FINANCE AGENCY (CALHFA) - HOME MORTGAGE REVENUE BONDS



PURPOSE OF BONDS:

CalHFA issues home mortgage revenue bonds to finance mortgage loans for newly constructed or existing single family homes. The program has three main goals: enable low to moderate income people or families to purchase homes on affordable terms, make mortgage financing available in deficient areas and stimulate the housing construction industry.

TOTAL REVENUE BONDS OUTSTANDING*:

\$1.4 billion

RATINGS:

Moody's: A1 / S&P: AA- / Fitch: NR

DEPARTMENT OF WATER RESOURCES - CENTRAL VALLEY PROJECT



PURPOSE OF BONDS:

DWR issues revenue bonds to fund the State Water Project, which consists of dams and water storage/transportation facilities constructed throughout the state for the purpose of supplying Californians with water, flood control, and other various public benefits.

TOTAL REVENUE BONDS OUTSTANDING*:

\$2.7 billion

RATINGS:

Moody's: Aa1 / S&P: AAA / Fitch: NR

DEPARTMENT OF WATER RESOURCES - POWER SUPPLY PROGRAM



PURPOSE OF BONDS:

DWR established the Power Supply program to purchase electrical power from wholesalers during the California energy crisis of 2001. DWR issued these bonds to provide permanent financing for these electricity purchases.

TOTAL REVENUE BONDS OUTSTANDING*:

\$3.9 billion

RATINGS:

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

CALIFORNIA STATE UNIVERSITY



PURPOSE OF BONDS:

CSU issues revenue bonds in order to finance capital projects across CSU's 23 campuses. These projects include student housing, parking facilities, and student unions.

TOTAL REVENUE BONDS OUTSTANDING*:

\$5.8 billion

RATINGS:

Moody's: Aa2 / S&P: AA- / Fitch: NR

UNIVERSITY OF CALIFORNIA - GENERAL REVENUE BONDS



PURPOSE OF BONDS:

The University of California Regents issue revenue bonds to fund capital projects and improvements throughout the university system.

TOTAL REVENUE BONDS OUTSTANDING*:

\$10.7 billion

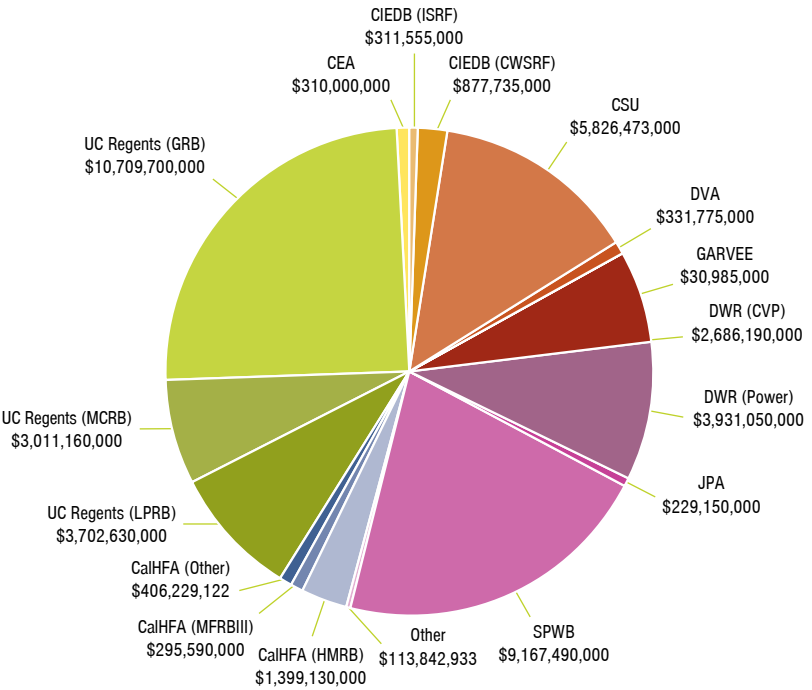
RATINGS:

Moody's: Aa2 / S&P: AA / Fitch: AA

* As of June 30, 2017.

HOW MUCH REVENUE BOND DEBT IS OUTSTANDING?

STATE OF CALIFORNIA'S REVENUE BONDS OUTSTANDING BY BOND PROGRAM*



TOTAL = \$43,340,685,055

* As of June 30, 2017.

■	CEA	California Earthquake Authority
■	CIEDB (ISRF)	California Infrastructure and Economic Development Bank (Infrastructure State Revolving Fund Program)
■	CIEDB (CWSRF)	California Infrastructure and Economic Development Bank (Clean Water State Revolving Fund)
■	CSU	Trustees of the California State University
■	DVA	Department of Veterans Affairs
■	GARVEE	Grant Anticipation Revenue Vehicle Bond Program
■	DWR (CVP)	Department of Water Resources (Central Valley Project Water System Revenue Bond Program)
■	DWR (Power)	Department of Water Resources (Power Supply Revenue Bond Program)
■	JPA	Joint Power Authorities
■	SPWB	State Public Works Board
■	Other	State Agencies outstanding revenue bond debt that constitutes the "Other" category include: California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), California Health Facilities Financing Authority (CHFFA), the State School Fund (CIEDB), and the Energy Efficiency Program.
■	CalHFA (HMRB)	California Housing Finance Agency (Home Mortgage Revenue Bond Program)
■	CalHFA (MFHRBIII)	California Housing Finance Agency (Multifamily Housing Revenue Bond III Program)
■	CalHFA (Other)	California Housing Finance Agency (Other)
■	UC Regents (LPRB)	University of California Regents (Regents Limited Project Revenue Bond Program)
■	UC Regents (MCPRB)	University of California Regents (Medical Center Pooled Revenue Bond Program)
■	UC Regents (GRB)	University of California Regents (Regents General Revenue Bond Program)

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