## MOODY'S INVESTORS SERVICE

## **CREDIT OPINION**

9 May 2017



#### Contacts

Thomas Song 212-553-7159 AVP-Analyst thomas.song@moodys.com

Rachael Royal 212-553-4456 McDonald VP-Sr Credit Officer rachael.mcdonald@moodys.com

# Connecticut (State of) State Revolving Fund

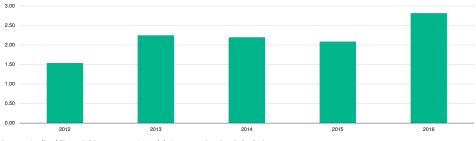
New Issue - Moody's assigns Aaa to CT's State Revolving Fund Gen Rev Bds (Green Bds, 2017 Ser A) & (2017 Ser B); stable

## **Summary Rating Rationale**

Moody's Investors Service has assigned Aaa to State of Connecticut's \$250,000,000 State Revolving Fund General Revenue Bonds, (Green Bonds, 2017 Series A) and has assigned Aaa to \$120,000,000 State Revolving Fund Refunding General Revenue Bonds, (2017, Series B). The Bonds are being issued under the General Bond Resolution (GBR), dated December 17, 2002. At this time, we are maintaining the Aaa ratings on the outstanding debt of State of Connecticut's State Revolving Fund issued under the GBR, affecting an additional \$801,000,000 of outstanding bonds. The outlook is stable.

The rating is based on a very strong default tolerance (46%) provided by program structure and high over-collateralization of assets to debt (2.82x as of June 30, 2016). Supporting the rating is high credit quality of loan pool and solid management and governance.

#### Exhibit 1 Asset-to-Debt Ratio At All Time High



Source: Audited Financial Statements; Moody's Investors Service Calculations

## **Credit Strengths**

- » Default Tolerance: 46% of loans could default for the entire length of the program and still meet debt service obligations. (Includes haircuts for investment counterparties with ratings below the required threshold for Aaa rating program.)
- » Cross-collateralization: each series of bonds has all available moneys in the SRF program as sources of payment. All available moneys in SRF program are available to pay debt service, though the majority is not pledged to bondholders. The program structure, however, is closed loop and moneys cannot be used for any other purpose.
- » Very strong credit quality of the loan portfolio.
- » Management's proactive monitoring of loans which aids borrowers' track record of no missed loans payments.

#### Credit Challenges

- » Thin debt service coverage projected in stressed cash flows due to debt service spikes in fiscal years ending in 2016 and 2019; cash flows projected to sufficiently cover debt service until bond maturity.
- » Counterparty risk as a material amount of investments (\$115.9M) were held with GIC providers as of June 30, 2016.

#### **Rating Outlook**

The stable outlook reflects the strong loan portfolio and sufficient cash and investments balances to pay debt service.

### Factors that Could Lead to an Upgrade

» N/A

#### Factors that Could Lead to a Downgrade

- » A significant credit deterioration or increased concentration of the loan portfolio can place downward pressure
- » Substantial increased leveraging of the program that results in a significant decrease in default tolerance or debt service coverage

#### **Key Indicators**

#### Exhibit 2

#### **Connecticut State Revolving Fund**

	2012	2013	2014	2015	2016
Total of bonds outstanding (in millions)	791	784	708	800	801
Default Tolerance	46%	46%	46%	49%	49%
Number of unique borrowers	95	97	93	111	106
Percentage of pool top 5	41%	40%	45%	47%	42%
Percentage of pool below 1%	13%	15%	14%	19%	14%
Total loans outstanding (in millions)	1205	1194	1057	1002	1703

Data as of our last review date; default tolerance includes haircuts to certain investments Source: Connecticut and Moody's Investors Service calculations

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

## **Detailed Rating Considerations**

#### Loan Portfolio: Composition Characterized by Size and Diversity

The high credit quality (described further below) and loan portfolio composition supports the Aaa rating on Connecticut State Revolving Fund Program (SRF Program). Each participant in the program must pledge its full faith and credit or a dedicated revenue source as security for repayment of the loan. Approximately 77% of pledged loans are backed by a general obligation pledge or a combination of a general obligation pledge and revenue pledge of the borrower based on outstanding loans as of March 31, 2017. The SRF Program has approximately \$1.2 billion loans outstanding and \$602 million undrawn loan and anticipated commitments, expected to total approximately \$1.8 billion in borrower loan commitments through March 31, 2018. The size and diversity of the program's loan portfolio is characterized by 103 unique borrowers, 47% of loan commitments attributed to the top 5 borrowers, and borrowers comprising less than 1% of loan commitments is 17%.

#### Underlying Credit Quality and Default Tolerance: High Credit Quality and Default Tolerance Is Key Credit Factor

A key element of the Aaa rating on the SRF Program is the high credit quality of the borrowers in the loan portfolio. With available investments and liquid assets, the program could withstand 46% of its loans defaulting through maturity and still meet debt service on all bonds issued under the GBR. Default tolerance and cash flow projections assume 0% reinvestment earnings held in short-term investments and discounts revenues and principal from funds held with downgraded GIC Providers. GIC Providers include: Trinity Funding Company, Bank of America Corp. American International Group, Inc. and Societe Generale.

This substantial default tolerance score is an important credit strength. It is important to note that no borrower has actually suffered a missed payment or default, and though the default tolerance is very high, a default is unlikely to occur.

#### LIQUIDITY

The program has good liquidity benefiting from substantial reserves that are available to pay bond debt service. Approximately 76% of available funds are invested in the Connecticut's short-term interest fund or held in cash, and the balance is held in collateralized guaranteed investments contracts (GICs).

#### Legal Framework, Covenants and Debt Structure: General Bond Resolution Provides Program Flexibility and Efficiency

The Bonds are issued under Connecticut SRF's GBR and are payable from all available funds in the Revolving Fund, which includes: borrower loan repayments and income or principal revenue from other assets and investments. All funds are available for payment for debt service, but only monies in the pledged fund, debt service fund, bond proceeds fund, and support funds are pledged to bondholders. As a practical matter, all monies in the SRF Program are available to pay debt service because funds may not be transferred out of the program under federal requirements.

Furthermore, loan repayments are deposited into the debt service fund on a monthly basis as they are paid. The GBR does not require a reserve fund, which grants the state the flexibility to determine the required reserve levels with each new series of debt through the use of a supplemental resolution. The SRF Program had approximately \$510 million in cash and investments as of March 31, 2017.

In addition, the drinking water programs and clean water programs are cross-collateralized. Both the drinking water program and the clean water program make loans from proceeds of the bonds. Loan repayments from the SRF Program are deposited to the State Revolving Fund General Revenue Bond Program and are available to pay all bonds whether loans were made under the drinking water program or the clean water program. The cross-collateralization has been structured in accordance with the Environmental Protection Agency's regulations.

#### DEBT STRUCTURE

The 2017 Series A and B bonds will bear interest at fixed interest rates to their maturity or prior redemption.

#### **DEBT-RELATED DERIVATIVES** None.

#### PENSIONS AND OPEB

Not a material factor in the methodology.

#### Management and Governance: Management Characterized by Fiscal Conservatism and Proactive Loan

A further credit strength of the program is the fiscal conservatism and careful management practices of the parties involved. The loans are proactively monitored through coordination with the State's Office of Policy and Management. The program is jointly managed by the Treasurer's Office and the Departments of Energy and Environmental Protection (DEEP) and Public Health (DPH). The Treasurer's Office is responsible for implementation and management of the fund. DEEP and DPH are responsible for preparing project priority lists and eligibility requirements and for monitoring projects. Moody's views the coordination and insight of these three entities as strengths to the program.

#### Legal Security

The 2017 Series A and B bonds are issued under the GBR and are special obligations of the State of Connecticut, and solely payable from all available moneys in the Revolving Fund, including loan repayments and income or principal of any other assets or investments necessary to pay bond debt service.

#### **Use of Proceeds**

The 2017 Series A bonds will be used to make loans to borrowers in connection with the financing or refinancing of public wastewater infrastructure projects and public drinking water infrastructure projects and to pay costs of issuance. The 2017 Series B bonds will be used to refund the 2009 Series A bonds and pay costs of issuance.

#### **Obligor Profile**

The Connecticut State Revolving Fund consists of (i) a wastewater pollution control revolving fund program (Clean Water) established by the State under the federal Water Quality Act of 1981, and (ii) the drinking water revolving fund program established by the State under the 1996 amendments to the Safe Drinking Water Act. Federal capitalization grants and state matching funds are used to provide loans to qualifying clean and drinking water projects.

#### Methodology

The principal methodology used in this rating was U.S. State Revolving Fund Debt published in March 2013. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

#### Ratings

#### Exhibit 3

Connecticut (State of) State Revolving Fu	nd
Issue	Rating
State Revolving Fund General Revenue Bonds	Aaa
(Green Bonds, 2017 Series A)	
Rating Type	Underlying LT
Sale Amount	\$250,000,000
Expected Sale Date	05/31/2017
Rating Description	Revenue: Government
	Enterprise
State Revolving Fund Refunding General Revenue	Aaa
Bonds (2017 Series B)	
Rating Type	Underlying LT
Sale Amount	\$120,000,000
Expected Sale Date	05/31/2017
Rating Description	Revenue: Government
	Enterprise

Source: Moody's Investors Service

© 2017 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

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

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

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

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

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

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

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AF5L 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

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

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

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

REPORT NUMBER 1070975

## MOODY'S INVESTORS SERVICE