

# RatingsDirect®

---

## Summary:

# New Haven, Connecticut; General Obligation

### Primary Credit Analyst:

Thomas J Zemetis, New York + 1 (212) 438 1172; [thomas.zemetis@spglobal.com](mailto:thomas.zemetis@spglobal.com)

### Secondary Contact:

Victor M Medeiros, Boston (1) 617-530-8305; [victor.medeiros@spglobal.com](mailto:victor.medeiros@spglobal.com)

## Table Of Contents

---

Rationale

Outlook

Related Research

## Summary:

# New Haven, Connecticut; General Obligation

### Credit Profile

US\$160.0 mil GO rfdg bnnds ser 2018B dtd 08/09/2018 due 08/01/2048

*Long Term Rating*

BBB+/Negative

New

US\$58.03 mil GO bnnds ser 2018A dtd 08/09/2018 due 08/01/2048

*Long Term Rating*

BBB+/Negative

New

## Rationale

S&P Global Ratings lowered its long-term rating on New Haven, Conn.'s existing general obligation (GO) debt to 'BBB+' from 'A-'. At the same time, we assigned our 'BBB+' long-term rating to the city's series 2018A GO bonds and series 2018B GO refunding bonds. The outlook on all ratings is negative.

The downgrade reflects our view of New Haven's sustained structural imbalance, stemming from optimistic revenue and expenditure assumptions, contributing to misaligned revenue and expenditures over the past three fiscal years, including a projected \$13 million to \$15 million deficit in fiscal 2018. The downgrade also reflects our view that the deterioration of unassigned reserves to negative 0.5% of operating expenditures in fiscal 2017 limits the city's ability to absorb potential reductions in state funding and rising fixed costs related to medical self-insurance, ongoing capital investment, and retirement benefits. Given material changes in these credit factors over several years, we believe New Haven's weakened budgetary performance and flexibility will unlikely return to levels that support a higher rating in the near-term.

The negative outlook reflects our expectation that, despite New Haven's use of debt restructurings and identification of budget reforms to address state-level fiscal uncertainty and accumulated deficits for fiscal 2019, it has historically and will likely face ongoing difficulties in achieving or sustaining balanced performance, which could lead to further deterioration of the city's flexibility and liquidity. Therefore, we believe there is, at least, a one-in-three chance that we could lower the rating over the next two years.

New Haven's full faith and credit pledge, payable from the levy of an unlimited-ad valorem tax on all taxable property in the city, secures the series 2018A GO bonds and series 2018B GO refunding bonds.

We understand city officials intend to use proceeds from the series 2018A bonds (approximately \$58.03 million) to finance various public improvements, as well as school and urban renewal projects.

We understand officials intend to use from the series 2018B bonds (approximately \$160 million) to restructure certain maturities to generate near-term debt service reductions that will help stabilize operational budget increases. Under the restructuring, the city could produce upfront debt service cost savings of \$33.1 million for fiscal 2019. It also projects cash flow savings ranging from \$4.5 million to \$18.8 million between fiscal 2020 to fiscal 2025, at which point, annual debt service will increase and extend debt service through final bond maturity in 2034. Concurrently, the

restructuring is intended to provide the city with flexibility to issue new money debt for future infrastructure projects consistent with its capital plan.

The rating reflects our opinion of the following factors for New Haven, specifically its:

- Weak management assessment that reflects a weak operating environment that contributed to revenue and expenditure imbalances over the past three fiscal years, and currently limited long-term financial forecasting;
- Very weak budgetary performance, with operating deficits in the general fund and at the total governmental fund level in fiscal 2017, with year-end projections estimating deficit operating results in fiscal 2018;
- Very weak budgetary flexibility, with an available fund balance in fiscal 2017 of negative 0.5% of operating expenditures that is also low on a nominal basis at negative \$3.8 million, as well as inconsistent local tax levying practices and heavy reliance on intergovernmental aid;
- Adequate liquidity, with total government available cash that we expect will decline in the near term relative to its fiscal 2017 levels at 8.5% of total governmental fund expenditures and 84.8% of governmental debt service, but access to external liquidity we consider strong;
- Strong economy, with access to a broad and diverse metropolitan statistical area (MSA) and a local stabilizing institutional influence, but also a high percentage of exempt properties within its tax base, making it difficult for management to raise local-source revenues;
- Very weak debt and contingent liability position, with debt service carrying charges at 10% of expenditures and net direct debt that is 78.1% of total governmental fund revenue, as well as a large pension and other postemployment benefit (OPEB) obligation and the lack of a plan to sufficiently address the obligation; and
- Strong institutional framework score, although we believe recent state fiscal challenges have contributed to a less predictable state aid environment for Connecticut municipalities.

### **Weak management environment**

Our assessment of the city's financial management reflects sustained structural imbalance over the past three fiscal years, which we believe is attributable to an uncertain revenue environment and pressure from fixed costs related to retirement and self-insurance, but also the city's historical use of somewhat optimistic revenue and expenditure assumptions in its budget development framework. Finance officials typically use three years of historical trend analysis to create a line-item budget, and they consult outside sources to understand revenue and expenditure trends. We understand that the New Haven and the Board of Education have undergone a review of its procedures and programs for fiscal 2019 in an effort to align revenue and expenditures. However, in our assessment of the New Haven's budget assumptions, we believe that the city continues to face pressures, which limit our confidence that these budget projections are well-tested and sustainable from a long-term and recent trend perspective to restore structural balance.

Therefore, in our view, the city's management conditions are weak, despite "standard" financial policies and practices under our FMA methodology, indicating the finance department maintains adequate policies in some but not all key areas.

During each fiscal year, finance officials monitor budget performance and management presents a monthly budget-to-actual report to the Board of Alders. The city does not have a formal long-term financial plan, but city

officials indicate that they are on target to develop and submit a five-year financial forecast to the Board of Alders later on in the current fiscal year. However, New Haven does maintain a five-year capital improvement plan (CIP), which management updates annually and incorporates into budget discussions. The CIP includes a comprehensive list of capital projects and identifies pay-as-you-go, grants, and bond financing sources.

New Haven does not have a formal debt management policy, but the city does have an investment policy and management reports holdings and returns to the board monthly. The city does not maintain a formal fund balance policy, but it has an informal target to build reserves to 5% of general fund expenditures. However, the city has not met or sustained its general fund balance at this level over the last three fiscal years. Management expects to evaluate practices and establish additional policies over the next two years, and our future reviews will consider the changes made and demonstrated adherence to these practices and policies.

### **Very weak budgetary performance**

New Haven's budgetary performance is very weak in our opinion. The city had operating deficits of negative 2.2% of expenditures in the general fund and negative 1.7% across all governmental funds in fiscal 2017. Our analysis of the city's budgetary performance adjusts for net transfers out of the general fund to other governmental funds and non-recurring capital expenditures paid with bond proceeds. Weakening our view of New Haven's performance is the city's continued extension of debt maturity, in effect deferring expenditures, which inflates budgetary result ratios.

In our view, recurring misalignment of the New Haven's revenue and expenditures have demonstrated structural imbalance over the past two audited fiscal years, and the city's year-end projections show a general fund deficit in fiscal 2018, indicating budgetary performance will likely remain very weak in the near-term. In addition, its reliance on short- and medium-term relief from debt restructurings or cost deferments to achieve budgetary alignment could mask underlying factors that prolong structural imbalance. While finance officials and the Board of Education have outlined potential gap-closing measures for implementation in fiscal 2019, we note that these actions come at a time when the city faces significant headwinds that will likely challenge general fund performance over our two-year outlook horizon.

First, recent year-end deficits in the general fund were driven by negative operations in its internal services fund, which are now accounted for in 2017 general fund operations. While the city took steps to reduce its exposure to these risks, unexpected medical self-insurance claims contributed to an accumulated deficit net position in fiscal 2015 (\$7.38 million) and fiscal 2016 (\$9.15 million). For fiscal 2017, the city ended the fiscal year with a nearly \$5.59 million negative self-insurance net position. While New Haven increased its fiscal 2019 appropriation by \$5 million to address medical self-insurance costs, we believe volatility in claim activity will likely challenge the city's budget beyond the current budget year.

In addition, the city continues to operate in a less predictable state aid environment. Connecticut's budget impasse last year, which extended four months into the 2018-2019 biennium, had a direct effect on municipal finances entering fiscal 2018. While the prospect for additional state cuts affects all local governments, New Haven's budgetary performance is particularly vulnerable due to its substantial reliance on state funding from payments-in-lieu-of-taxes (PILOT) and Education Cost Sharing (ECS) grants. For fiscal 2017, state aid generated 48.5% of general fund revenues while property taxes accounted for 43.3%. In fiscal 2018, the city budgeted ECS, PILOT, and other state grant payments to be level with the prior year, but state revenue were \$9.4 million less than the adopted budget.

Concurrently, the city reduced its mill levy for fiscal 2018 to 38.68 mills from 41.55 mills to provide taxpayer relief following a property revaluation. In New Haven's case, we view inconsistent tax rate adjustments as a potential credit weakness. The changes in the tax rate have not been consistent to match the city's expenditure needs. Due to reduced state aid and projected local revenue shortfalls in 2018, the city decided to increase its mill rate by 11% (or 4.30 mills) in fiscal 2019. In our view, New Haven maintains a high millage rate, but property tax collections have remained strong, averaging 98% to 99% over the past five fiscal years. Should state funding gaps persist leading to declines in state aid, however, we believe the city will likely need to generate additional revenue from local revenue sources to maintain balanced operations. This could prove difficult given New Haven's overall high amount of tax-exempt property and weaker wealth and income factors relative to other Connecticut municipalities, which could burden its existing tax base.

Despite a \$31 million reduction in debt service payments through last year's debt restructuring, city officials estimate that New Haven will recognize a \$13 million-\$15 million general fund deficit at fiscal year-end 2018. Management reports higher-than-budgeted departmental appropriations, particularly education (\$6.9 million), fire (\$4.8 million), and police department (\$200,000) that accounted for the largest negative variances. The city also expects rising medical and self-insurance claims to be \$2 million to \$3.5 million over budget. In addition to reduction in state revenue, the city anticipates building permits to fall short of budget projections. However, better-than-projected property and conveyance tax receipts, coupled with a \$2 million increase in the New Haven Parking Authority PILOT and a \$2.5 million voluntary payment increase from Yale University could partially offset these revenue losses.

The fiscal 2019 general fund budget totals \$547.09 million, a 1.5% increase from the previous year. In addition to the local tax increase, the city adjusted its revenue projections from state aid and other revenue initiatives by \$18.2 million by increasing licenses, permits, and fees to generate new revenue. The Board of Education has also provided various operational savings and program consolidation measures. Although the city did not include the \$33.1 million deferment of debt service payments from the debt restructuring in the current budget, city officials expect the debt service savings to support its efforts to restore balanced operations, address the deficit in its medical self-insurance account, and fund capital improvements.

The city enters fiscal 2019 with a more predictable state aid outlook compared to prior fiscal years, but a potentially multi-billion dollar state deficit entering the next biennium could lead the state to make deep cuts to municipal grants. Therefore, we believe our view of New Haven's budgetary performance will remain very weak over the next two years.

### **Very weak budgetary flexibility**

New Haven's budgetary flexibility is very weak, in our view, with an available fund balance in fiscal 2017 of negative 0.5% of operating expenditures. In addition, the city's reserves are low on a nominal basis at negative \$3.8 million, which we view as vulnerably low and a negative credit factor.

Although the city has historically demonstrated its ability to rebuild fund balance temporarily following prior debt restructurings, we believe that past short-term debt service savings have not kept pace with rising expenditures. When accounting for the negative unrestricted net position in its medical self-insurance accounts, the city's available general fund reserves have remained negative over the past three audited fiscal years. Based on the city's projection to end the fiscal year with a \$13 million-\$15 million negative operating result, we generally expect its fund balance position to be

negative 3% to 3.5% of general fund expenditures.

Adding to our view of New Haven's very weak flexibility are inconsistent revenue-raising practices that stem from local resistance to levying the mill rate on the city's underlying tax base, and heavy reliance on intergovernmental aid that has been under persistent pressure because of the state's constrained budgetary environment. The city increased its mill rate by 11% in fiscal 2019 to support rising expenditures and mitigate potential reductions in state aid, but it has historically shown reluctance to raise mill rates in order to support a more favorable business climate and economic development. Cash flow savings from debt restructuring could help New Haven reduce the negative fund balance in fiscal 2019, but we expect fund balance to remain vulnerably low, limiting the city's flexibility to mitigate unforeseen operational pressures beyond the two-year outlook period.

### **Adequate liquidity**

In our opinion, New Haven's liquidity is adequate, with total government available cash that we expect will decline in the near term relative to its fiscal 2017 levels at 8.5% of total governmental fund expenditures and 84.8% of governmental debt service in 2017. In our view, the city has strong access to external liquidity if necessary.

New Haven's access to external liquidity, in our view, reflects its issuance of GO bonds, tax anticipation notes (TANs), and bond anticipation notes in the past 20 years. Following several debt restructurings since fiscal 2013, the city's underlying liquidity has improved. Furthermore, over the past two fiscal years, the city issued tax anticipation notes (TANs) to prefund its pension requirements and achieve early payment cost savings. In fiscal 2017, the par amount of the TANs was \$33.3 million. The par amount on the fiscal 2018 TANs issuance was \$25 million. However, the city has recently used debt restructurings to generate cash flow savings that supports its adequate available cash position, which we view as a symptom of the city's structural imbalance. We believe the city's liquidity position could worsen in the out years if the city is unable to reach a more stable operating position. If operating imbalances continue, we believe the city may need to continue accessing the market to support its cash flow needs through either cash flow notes or additional debt restructurings.

All of the city's investments comply with state statutes, and we do not consider them to be aggressive. The majority of New Haven's cash is invested in fixed income funds, U.S. treasuries, and the state's short-term investment fund; we have included the city's general fund investments with maturities of less than one year in our calculation of liquidity.

New Haven has a revolving loan agreement with Bank of America N.A. that can accommodate issuance of up to \$70 million in grant anticipation notes to finance school construction projects. The agreement contains certain events of default that we consider somewhat permissive. However, there is no acceleration or termination of the loan as a remedy.

The parking authority, a component unit of the city, has a \$6.8 million direct purchase revenue bond secured by the pledged income from parking revenue. New Haven, acting on behalf of the authority, has an interest-rate swap agreement--which terminates Jan. 1, 2022--to effectively convert the variable-rate interest on the bonds to a fixed rate. The outstanding principal on the revenue bonds is \$6.18 million as of June 30, 2018. In addition, we understand that a negative rating action does not trigger an event of default. Given the small size of the direct purchase debt and related swap agreement in relation to its cash position, we believe the city has sufficient liquidity for a potential event of default or remedy associated with the direct purchase and swap agreements.

## **Strong economy**

We consider New Haven's economy strong, in part due to its participation in the New Haven-Milford MSA, which we consider broad and diverse. The city, with an estimated population of 130,029, is located in New Haven County and has a projected per capita effective buying income of 75% of the national level and per capita market value of \$72,584. Overall, the city's full estimated market value was stable over the past year at \$9.4 billion in 2019. The city's net taxable grand list was \$6.6 billion for fiscal 2019.

New Haven encompasses approximately 20 square miles in south central Connecticut. The city is located roughly 80 miles northeast of New York City and 40 miles south of Hartford. A well-developed network of interstate highways and rail lines intersect in New Haven, connecting residents with employment opportunities in the New Haven-Milford MSA. We consider the city's tax base to be diverse, with the top 10 taxpayers comprising 15.4% of its net taxable grand list.

The city historically featured a substantial manufacturing base that supported income growth and employment stability, but due to declines in the manufacturing sector, New Haven's economy developed into a center for education and health care, as well as professional and business services, commercial retail, and transportation. Following the national recession, the New Haven MSA experienced contraction in its service and manufacturing industries that slowed its economic recovery compared to the state and other metropolitan areas. As a result, local wealth and income conditions have remained relatively flat over the past several years. While officials indicate employment in these sectors is likely to increase, we expect New Haven's education and health care sectors to anchor its employment base. We note, however, that despite the county's 5% unemployment rate, the city's unemployment has traditionally tracked higher—and is vulnerable to an adverse change in the economy or business environment.

New Haven is home to higher education and medical institutions, notably Yale University and Yale-New Haven Hospital. Although the university's large student population and inventory of tax-exempt property could understate local wealth and income levels, we believe Yale's outsized presence in New Haven is a stabilizing factor that anchors the local economic and employment base. City officials also report that Yale University is continuing with an extensive capital program at its university and medical campuses, and it continues to attract federal research grants and venture capital investment to the city. As a result, technology, pharmaceutical, and biotechnology firms have also started or relocated to the New Haven area.

Despite the city's position as a significant employment center, a significant amount of its employment base resides in the outlying suburbs, which limits New Haven's ability to capture revenue from its primary economic strengths. Economic redevelopment efforts have yielded only modest increases in the city's grand list in recent years. However, officials indicate that New Haven could benefit from the expiration of commercial and residential property tax easement programs; the city estimates this will add nearly \$300 million in taxable value to the grand list over the next five to seven years. We view management's expectation to realize a greater share of taxable developments as potentially beneficial to broaden its currently weak-to-adequate underlying tax base and curb its reliance on unpredictable PILOT payments from the state for tax-exempt cultural, education, and government properties that constitute a considerable share of developed land in New Haven.

### **Very weak debt and contingent liability profile**

In our view, New Haven's debt and contingent liability profile is very weak. Total governmental fund debt service is 10% of total governmental fund expenditures, and net direct debt is 78.1% of total governmental fund revenue. We revised our assessment of the city's debt profile to very weak from weak due to the extension of debt maturities following the current debt restructuring. Approximately 50% of the city's direct debt is scheduled to be repaid within 10 years, which is no longer view as rapid.

The total direct debt following the series 2018A and 2018B bond issuances will be roughly \$709.9 million, of which we calculate \$629.4 million to be tax-supported GO bonds, and \$22.9 million in tax-supported GO debt related to component units of the city (parking authority and solid waste authority). The city has also has approximately \$57.6 million in grant anticipation notes pending the receipt of state grants for school construction. While we expect debt service payments to decline to more-moderate levels due to the debt restructuring in fiscal 2019, our projections show that debt service could return to levels we consider elevated and the restructuring will extend the aggregate average life of the bonds by approximately 3.1 years.

As outlined in the city's five-year CIP, New Haven could issue between \$40 million and \$47 million annually over the next four years (totaling roughly \$175 million) for additional capital improvements for general government and school purposes. However, management indicates that the timing and magnitude of future debt issuances are dependent on the city's economic and fiscal conditions.

In our opinion, a credit weakness is New Haven's large pension and OPEB obligation, without a plan in place that we think will sufficiently address increasing costs of these obligations. New Haven's combined required pension and actual OPEB contributions totaled 9% of total governmental fund expenditures in 2017. Of that amount, 5.6% represented required contributions to pension obligations, and 3.3% represented OPEB payments. The city made 102% of its annual required pension contribution in fiscal 2017.

The city maintains two single-employer contributory, defined-benefit pension plans: The City Employees' Retirement Fund (CERF) and the Policemen's and Firemen's (P&F) Retirement Fund. The CERF had a net pension liability of \$311.3 million as of its July 1, 2016, valuation and was just 34.1% funded, while the police and fire plan had an unfunded liability of \$468.6 million and was just 40.9% funded. New Haven exceeded its actuarially determined contribution to both funds, totaling \$20.4 million (CERF) and \$27.5 million (P&F). It also provides OPEB to its employees on a pay-as-you-go basis. As of the latest valuation date, July 1, 2015, the city's OPEB unfunded actuarial accrued liability was \$557 million and was 0.1% funded.

City officials have taken steps to reduce the city's future pension and OPEB liabilities. However, the liabilities are large and they will likely remain a credit weakness beyond the two-year outlook period. The city lowered the investment rate assumption to 7.75% from 8% for both pension funds. According to officials, recent investment returns of 9% and 12% for pension and OPEB, respectively, exceeded this benchmark. New Haven is also asking new employees to contribute toward OPEB at 0.5% of pay in 2017, 0.75% in 2018, and 1.25% in 2019. The city is negotiating new contracts to encourage labor unions to shift to health savings account high deductible plans, and the city is partnering with Yale New Haven Hospital to treat chronic conditions. Nevertheless, we view New Haven's retirement costs as an ongoing credit concern, which could continue to pose negative implications for the city's credit profile.



## **Strong institutional framework**

The institutional framework score for Connecticut municipalities is strong.

We lowered our predictability subfactor twice during the past two years based on our view that local governments are operating in a less-predictable environment when budgeting and forecasting state revenue. This action resulted from delayed passage of the state's biennial budget in 2017, which slowed payments to local governments, led to a period of significant budgetary stress, and forced municipalities to adopt 2018 budgets amid significant uncertainty. While we view the state's creation of the MARB in 2017 as a formal system support mechanism for identifying fiscal distress and providing assistance to municipalities, we continue to monitor MARB's efficacy and its potential effect on the legal and practical environment in which local governments operate in Connecticut. (For more information, please see the article, titled "Connecticut Rating Actions Do Not Affect Strong Institutional Framework Score on Local Governments," published April 19, 2018, on RatingsDirect.)

## **Outlook**

The negative outlook reflects a one-in-three chance we could lower our rating on New Haven's GO debt over a two-year outlook horizon. This is based on our expectation that New Haven continues to operate in an increasingly uncertain budget environment and faces risks of additional reductions to state support over the two years. The negative outlook also reflects the potential for the city's finances to remain structurally imbalanced in fiscal 2019, despite significantly lower debt service payments following the current debt restructuring, which could further limit its flexibility to mitigate growing costs associated with its self-insurance accounts and large unfunded retirement liabilities.

We could lower the rating if the city is unable to integrate long-term structural planning to achieve sustained budgetary balance through local revenue generation or spending reductions, or if its rising fixed costs overcrowd the budget and limit operational flexibility, leading the city to continue to rely on debt restructurings to support future budgets.

We could also lower the rating should New Haven's structural imbalance cause available general fund balance to deteriorate to a level less than negative 5% of expenditures over the next two years, which would be consistent with applying the rating cap of 'BBB'. However, we could revise the outlook to stable if the city were to sustain balanced operations without the use of one-time items and rebuild reserves to a level we consider commensurate with those of similarly rated peers. Contributing to this improved performance would likely require an improved management environment that enables New Haven to alleviate fixed cost pressures, eliminate the medical self-insurance deficit, and rebuild fund balance.

## **Related Research**

- S&P Public Finance Local GO Criteria: How We Adjust Data For Analytic Consistency, Sept. 12, 2013
- Incorporating GASB 67 And 68: Evaluating Pension/OPEB Obligations Under Standard & Poor's U.S. Local Government GO Criteria, Sept. 2, 2015
- Local Government Pension And Other Postemployment Benefits Analysis: A Closer Look, Nov.8, 2017

Ratings Detail (As Of July 25, 2018)		
New Haven GO		
<i>Long Term Rating</i>	BBB+/Negative	Downgraded
New Haven GO (AGM)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (AGM)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (BAM)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (BAM)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (BAM)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (BAM)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (BAM) (SECMKT)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
New Haven GO (FGIC)		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded
<b>New Haven GO</b>		
<i>Unenhanced Rating</i>	BBB+(SPUR)/Negative	Downgraded

Many issues are enhanced by bond insurance.

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at [www.standardandpoors.com](http://www.standardandpoors.com) for further information. Complete ratings information is available to subscribers of RatingsDirect at [www.capitaliq.com](http://www.capitaliq.com). All ratings affected by this rating action can be found on S&P Global Ratings' public website at [www.standardandpoors.com](http://www.standardandpoors.com). Use the Ratings search box located in the left column.

Copyright © 2018 by Standard & Poor's Financial Services LLC. All rights reserved.

No content (including ratings, credit-related analyses and data, valuations, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of Standard & Poor's Financial Services LLC or its affiliates (collectively, S&P). The Content shall not be used for any unlawful or unauthorized purposes. S&P and any third-party providers, as well as their directors, officers, shareholders, employees or agents (collectively S&P Parties) do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Parties are not responsible for any errors or omissions (negligent or otherwise), regardless of the cause, for the results obtained from the use of the Content, or for the security or maintenance of any data input by the user. The Content is provided on an "as is" basis. S&P PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs or losses caused by negligence) in connection with any use of the Content even if advised of the possibility of such damages.

Credit-related and other analyses, including ratings, and statements in the Content are statements of opinion as of the date they are expressed and not statements of fact. S&P's opinions, analyses and rating acknowledgment decisions (described below) are not recommendations to purchase, hold, or sell any securities or to make any investment decisions, and do not address the suitability of any security. S&P assumes no obligation to update the Content following publication in any form or format. The Content should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. S&P does not act as a fiduciary or an investment advisor except where registered as such. While S&P has obtained information from sources it believes to be reliable, S&P does not perform an audit and undertakes no duty of due diligence or independent verification of any information it receives. Rating-related publications may be published for a variety of reasons that are not necessarily dependent on action by rating committees, including, but not limited to, the publication of a periodic update on a credit rating and related analyses.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P reserves the right to assign, withdraw or suspend such acknowledgment at any time and in its sole discretion. S&P Parties disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgment as well as any liability for any damage alleged to have been suffered on account thereof.

S&P keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P may have information that is not available to other S&P business units. S&P has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

S&P may receive compensation for its ratings and certain analyses, normally from issuers or underwriters of securities or from obligors. S&P reserves the right to disseminate its opinions and analyses. S&P's public ratings and analyses are made available on its Web sites, [www.standardandpoors.com](http://www.standardandpoors.com) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.com) and [www.globalcreditportal.com](http://www.globalcreditportal.com) (subscription), and may be distributed through other means, including via S&P publications and third-party redistributors. Additional information about our ratings fees is available at [www.standardandpoors.com/usratingsfees](http://www.standardandpoors.com/usratingsfees).

STANDARD & POOR'S, S&P and RATINGSDIRECT are registered trademarks of Standard & Poor's Financial Services LLC.