

## Iowa Finance Authority; Single Family Multiple MBS

**Primary Credit Analyst:**

Jessica L Pabst, Englewood + 1 (303) 721 4549; jessica.pabst@spglobal.com

**Secondary Contact:**

Daniel P Pulter, Englewood + 1 (303) 721 4646; Daniel.Pulter@spglobal.com

**Table Of Contents**

---

Credit Highlights

Outlook

Credit Opinion

Legal Framework Analysis

Program Management And Operational Risk Analysis

Credit Quality Of The Asset Pool

Cash Flow Analysis

Anchor, Modifiers, And Holistic Analysis

Other Applicable Criteria And Final Rating

Related Research

# Iowa Finance Authority; Single Family Multiple MBS

## Credit Profile

US\$60.0 mil single fam mtg bnds (Mortgage Backed Securities Program) ser 2025A dtd 02/20/2025 due 07/01/2055

*Long Term Rating* AAA/Stable New

US\$54.1mil single fam mtg bnds (Mortgage Backed Securities Program) ser 2025B dtd 02/20/2025 due 07/01/2055

*Long Term Rating* AAA/Stable New

## Credit Highlights

- S&P Global Ratings assigned its 'AAA' long-term rating to the Iowa Finance Authority's (IFA) \$60 million series 2025A non-AMT (social bonds) and \$54.1 million series 2025B taxable single-family mortgage bonds (mortgage-backed securities [MBS] program).
- At the same time, we affirmed our 'AAA' long-term and 'AAA/A-1+' and 'AAA/A-1' dual ratings on the other applicable variable-rate series bonds outstanding under IFA's 1991 single-family mortgage bond resolution.
- The outlook is stable.

## Security

Bonds issued within the 1991 resolution are general obligations (GOs) of IFA, payable from the revenue, assets, and money pledged under the master indenture on a parity basis with all other obligations outstanding under the master indenture. The bonds are also supported by IFA's GO pledge.

The short-term component of the dual ratings on the authority's applicable variable-rate series bonds reflects our short-term rating on the Federal Home Loan Bank of Des Moines, U.S. Bank N.A., TD Bank N.A., and Royal Bank of Canada, which serve as the liquidity providers through standby bond purchase agreements.

## Credit overview

According to preliminary transaction documents, the authority will use the 2025 series A and B bonds' combined par amount of approximately \$114.1 million, to acquire Government National Mortgage Assn. (Ginnie Mae), Federal National Mortgage Assn. (Fannie Mae), or Federal Home Loan Mortgage Corp. (Freddie Mac)-guaranteed MBS, backed by pools of mortgage loans that have been, or are expected to be, made by participating lenders to qualified persons to finance single-family residential housing in Iowa, and to finance downpayment assistance (DPA) through the financing of DPA loans and grants.

The ratings reflect our view of the program's:

- Legal framework that links duties of key transaction parties with proper execution of the program in alignment with our criteria, and legal risks that we believe are sufficiently mitigated;
- Program management and operational risk assessment, which we consider neutral;
- Overcollateralization and cash flows capable of withstanding S&P Global Ratings-calculated loss assumptions, based

on the credit quality of the asset pool, in all provided cash flow stress scenarios, with a minimum projected asset-to-liability (A/L) parity ratio, after losses, of 104.9%;

- Sufficient liquidity to cover short-term disruptions in asset cash flows through program assets and a GO pledge; and
- Market position characteristics in line with the national housing market.

Our analysis of the program's legal framework, program management and operational risk, credit quality, and cash flow results in an anchor of 'aaa'. We have reviewed program cash flows and have determined that overcollateralization, as measured by the minimum A/L parity ratio, is sufficient to cover losses up to the 'aaa' level and cash flow data provided to us reflect the application of 'AAA' category stressed reinvestment and stressed interest rate assumptions that do not cap the anchor below 'aaa'. Given our 'AA+' issuer credit rating (ICR) on IFA and the program's hedging exposure of more than 2x net assets after projected credit losses, we have evaluated IFA's ability to post collateral under our stress scenario, and we do not consider this a constraint on the program anchor.

### **Environmental, social, and governance**

We analyzed the program's environmental, social, and governance (ESG) factors and opportunities relative to the legal framework, program management and operational risk, credit quality of the asset pool, cash-flow analysis, liquidity, and market position. We view ESG factors for the program as neutral in our credit analysis.

## **Outlook**

The stable outlook reflects the credit quality of the underlying MBS and our expectation that management will actively monitor the program, managing A/L parity at levels in line with the current rating.

### **Downside scenario**

We would consider a negative rating action if our assessment of program management and operational risks changes due to negative assessments, or if overcollateralization weakens and the credit quality of the underlying assets declines so that the resolution is not able to withstand projected losses at the current level.

## **Credit Opinion**

### **Legal Framework Analysis**

We analyzed the program's legal framework, which links the duties of the key transaction parties with the proper execution of the program in alignment with our criteria. In the event of a bankruptcy filing by the issuer, bondholders would likely be affected. However, we believe the likelihood of such an event is sufficiently remote, given our 'AA+' ICR on the Iowa Finance Authority, resulting in no cap on the anchor.

## Program Management And Operational Risk Analysis

Our program management and operational risk analysis considers five factors, which we assess as neutral or negative: program strategy and governance; loan origination and monitoring; asset and liability management; liquidity risk management; and counterparty risk management. In our view, IFA has an active role in the general oversight of the 1991 resolution program, as well as in the ongoing management of these risks. Our assessment of the IFA's program management and operational risk is neutral, resulting in no cap on the anchor.

### Program strategy and governance

Our assessment of IFA's program strategy and management contains no negative attributes. The authority's strategy concerning the 1991 resolution is well-defined, and largely revolves around mission-based growth serving the state market. The authority posts quarterly unaudited financials in addition to the annual audited financials. Management is well-tenured and sophisticated to the level necessary to plan and achieve operational goals, which are also supported by formal policies to manage risk.

### Loan origination and monitoring

We view the authority's loan origination and monitoring practices, supported by formal policies, to be neutral, without any negative attributes. The authority's standards governing its lending and origination are in line with those of peers, in our view. Loan servicing is performed through Idaho Housing and Finance Assn., and IFA receives and publishes certain loan portfolio data in its disclosures. As of Dec. 31, 2024, 9.1% of the portfolio was 30 days or more delinquent or in foreclosure.

### A/L management

We do not view any program A/L management attributes as negative. Over the past several years, the program's A/L parity remained relatively stable, a trend that we do not expect will change in the near term. There is no significant mismatch in asset and liability maturities, and no interest rate risk beyond what is captured in resolution cash flows.

### Liquidity risk management

We believe the program's derivative contracts do not introduce liquidity risks.

The program does not benefit from a dedicated reserve fund. In our opinion, IFA's investment guidelines are sufficient to support its liquidity needs. These investments include money market funds, U.S. government and government-sponsored enterprise obligations, and repurchase agreements.

### Counterparty risk management

IFA has liquidity facilities with four rated counterparties, with exposure to each provider between 34% and 17% of the total amount outstanding under its 1991 resolution. There are also derivative agreements with four rated counterparties to hedge a portion of its variable-rate debt. Exposure to these swap providers varies between 1% and 39% of the notional amount outstanding, with the earliest expiration in January 2034.

There is detailed planning and strategy behind the term and exposure of the authority's agreements with counterparties. Rating termination triggers are more than one rating category away from the current program rating. IFA maintains swap guidelines under which it manages risk exposure, and these guidelines are evaluated on a regular

basis.

## Credit Quality Of The Asset Pool

The 1991 resolution program is primarily backed by single-family MBS. A summary of the loan portfolio and the assumptions used in our credit quality analysis are shown in table 2. Our projected loss assumptions for the program's assets are shown in tables 3a and 3b.

## Cash Flow Analysis

We have reviewed program cash flows, including stress scenarios, and determined that overcollateralization, as measured by the minimum A/L parity ratio, is sufficient to cover credit losses and cash flow stress scenarios up to an anchor of 'aaa'. A summary of our cash flow analysis is shown in table 4.

Given our 'AA+' ICR on IFA and the program's hedging exposure of more than 2x net assets after projected credit losses, we have evaluated IFA's ability to post collateral under our stress scenario, and we do not consider this a constraint on the program anchor.

## Anchor, Modifiers, And Holistic Analysis

Our analysis of the program's legal framework, program management and operational risk, credit quality, and cash flows results in an anchor of 'aaa'.

We applied no modifier, based on our assessment of the availability of liquid reserves to cover debt service through short-term disruptions in cash flows due to the program being 98% backed by fully enhanced MBS and additional program equity that could cover the uninsured second loans in the portfolio.

We also applied no modifier based on the program's market position.

Applying our holistic analysis, after applicable modifiers and caps, results in no impact on the anchor, resulting in a stand-alone credit profile rating of 'aaa'.

## Other Applicable Criteria And Final Rating

The final program rating is 'AAA' after applying our additional criteria "Incorporating Sovereign Risk In Rating Structured Finance Securities: Methodology And Assumptions," published Jan. 30, 2019. In our view, U.S. public finance mortgage revenue bonds are highly sensitive to country risk; therefore, the program is eligible for ratings up to two notches above the rating on the U.S. sovereign. In our analysis of the credit quality of the asset pool, to determine 'AAA' credit loss assumptions we have haircut recoveries from federal enhancement. The program has sufficient credit support to cover these loss assumptions.

**Table 1****MRB program rating summary--Iowa Finance Authority MBS 1991 SFMBS resolution**

Legal framework	No cap
Program management and operational risk	No cap
<b>Cash flow analysis</b>	
Overcollateralization	aaa
Stressed cash flows	aaa
Hedging risk	No cap
HFA general obligation pledge	aa+
<b>Anchor</b>	
Anchor	aaa
<b>Modifiers and holistic analysis</b>	
Liquidity reserves	No modifier
Market position	No modifier
Holistic analysis	No modifier
<b>Stand-alone credit profile</b>	
SACP	aaa
Other applicable criteria	aaa
<b>Final</b>	
Final rating	AAA

N/A--Not applicable.

**Table 2****Program summary & assumptions****June 30, 2024**

<b>Program assets (% of balance)</b>	
Single-family whole loans	
Single-family MBS	97.6
Single-family subordinate loans	2.4
Multifamily whole loans	
Multifamily MBS or federally enhanced pass-through	
Other assets	
<b>Debt &amp; derivative summary % of balance)</b>	
Fixed-rate debt (% of balance)	84.7
Hedged variable-rate debt (% of balance)	12.8
Unhedged variable-rate debt (% of balance)	2.5
Total variable-rate debt (% of balance)	15.3
<b>Single-family program assumptions</b>	
No. of loans in portfolio	19,901.0
Total loan balance (\$000s)	1,536,244.6
Loans 30-year fixed (% of balance)	100.0
Loans with balloons or negative amortization (% of balance)	

Table 2

Program summary & assumptions (cont.)		June 30, 2024
Loans - other terms (% of balance)		
Weighted average FICO score		707.0
Weighted average mortgage rate (%)		5.0
Weighted average LTV (%)		
<b>Loan seasoning</b>		
< 5 years (% of balance)		85.1
5-10 years (% of balance)		11.1
10+ years (% of balance)		3.8
<b>Property type</b>		
Single-family residences (% of balance)		95.8
2-4 family residences (% of balance)		
Condo or cooperative apartment (owner-occupied) (% of balance)		2.5
Other property type (% of balance)		1.8
<b>Delinquency status</b>		
30-59 days (% of balance)*		4.8
60-89 days (% of balance)*		1.5
90-119 days (% of balance)*		0.6
120+ days or in foreclosure (% of balance)		2.2
<b>Insurance/guarantees</b>		
Ginnie Mae (% of balance)		52.1
Fannie Mae (% of balance)		31.2
Freddie Mac (% of balance)		14.4
PMI (% of balance)		
FHA (% of balance)		
VA (% of balance)		
USDA/RD (% of balance)		
Uninsured (% of balance)		2.4
Liquidation timeline adjustment (months)		N/A
Pool level foreclosure frequency adjustment		N/A

FICO--Fair Isaac Co. LTV--Loan-to-value. PMI--Private mortgage insurance. FHA--Federal Housing Administration. VA--Veterans Administration. USDA/RD--U.S. Department of Agriculture/Rural Development. N/A--Not applicable. \*As of Dec. 31, 2024.

Table 3a

Loss projection--Single-family mortgage-backed securities				
Rating level	WAFF (%)	WALS (before recovery) (%)	1 - Recovery rate (%)	Credit loss (%)
aaa	34.7	75.6	15.0	3.9
aa+	30.5	70.1		
aa	26.2	69.5		
aa-	24.4	68.8		
a+	22.2	59.4		

**Table 3a**

Loss projection--Single-family mortgage-backed securities (cont.)				
Rating level	WAFF (%)	WALS (before recovery) (%)	1 - Recovery rate (%)	Credit loss (%)
a	20.3	58.8		
a-	18.0	58.1		
bbb+	15.8	52.0		
bbb	13.4	51.4		
bbb-	12.6	50.8		
bb+	12.1	45.9		
bb	11.3	45.3		
bb-	10.2	44.7		
b+	9.1	39.9		
b	8.1	39.3		
b-	7.0	39.3		

WAFF--Weighted average foreclosure frequency. WALS--Weighted average loss severity.

**Table 3b**

Loss projection--Single-family subordinate loans				
Rating level	WAFF (%)	WALS (before recovery) (%)	1 - Recovery rate (%)	Credit loss (%)
aaa	34.7	100.0	100.0	34.7
aa+	30.5	100.0	100.0	30.5
aa	26.2	100.0	100.0	26.2
aa-	24.4	100.0	100.0	24.4
a+	22.2	100.0	100.0	22.2
a	20.3	100.0	100.0	20.3
a-	18.0	100.0	100.0	18.0
bbb+	15.8	100.0	100.0	15.8
bbb	13.4	100.0	100.0	13.4
bbb-	12.6	100.0	100.0	12.6
bb+	12.1	100.0	100.0	12.1
bb	11.3	100.0	100.0	11.3
bb-	10.2	100.0	100.0	10.2
b+	9.1	100.0	100.0	9.1
b	8.1	100.0	100.0	8.1
b-	7.0	100.0	100.0	7.0

WAFF--Weighted average foreclosure frequency. WALS--Weighted average loss severity.

**Table 4**

Overcollateralization			
	2024EF	2024GH	2025AB
Opening asset/liability parity date	July 1, 2023	July 1, 2023	July 1, 2023
Opening asset/liability parity (%)	112.8	112.8	110.6
Minimum asset/liability parity (%)	109.8	109.3	109.1
Total projected credit loss (%)*	4.6	4.9	4.9



Table 4

Overcollateralization (cont.)			
	2024EF	2024GH	2025AB
Loss/liabilities (%)	5.0	4.5	4.2
Net asset/liability parity, after losses (%)	104.9	104.8	104.9

\*At the highest rating level at which the MRB program's available overcollateralization is sufficient to cover.

## Related Research

- U.S. Home Price Overvaluation Softens As Wage Growth Outpaces Home Price Gains, April 15, 2024

### Ratings Detail (As Of January 16, 2025)

Iowa Finance Authority single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds ser 2024 F due 07/01/2054		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds ser 2024 G due 07/01/2054		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority single fam mtg bnds ser 2024 H due 07/01/2039		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority sin fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority sin fam mtg bnds (non-amt)(social bnds)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority sin fam mtg bnds (Non-AMT) (Social Bonds)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Finance Authority sin fam mtg bnds (Taxable)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth mtg rev bnds (non-AMT) fixed rate		
<i>Long Term Rating</i>	AAA/Stable	Affirmed

## Ratings Detail (As Of January 16, 2025) (cont.)

Iowa Fin Auth single fam mtg		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds		
<i>Long Term Rating</i>	AAA/A-1+/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds ser 2017 C due 07/01/2027		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds ser 2019E due 07/01/2049		
<i>Long Term Rating</i>	AAA/A-1/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds ser 2022K		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (non-AMT)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Mtg-backed Secs Prog) ser 2018 B due 07/01/2047		
<i>Long Term Rating</i>	AAA/A-1/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Non-AMT)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Non-AMT) VRDB		
<i>Long Term Rating</i>	AAA/A-1/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Non-AMT) (Social Bonds) ser 2022D dtd 05/03/2022 due 07/01/2052		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Non-AMT) (SOFR Floating Rate) (Social Bonds) ser 2022E dtd 05/03/2022 due 01/01/2052		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Non-AMT) (Variable Rate) ser 2016B due 07/01/2045		
<i>Long Term Rating</i>	AAA/A-1+/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Social Bnds)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed

## Ratings Detail (As Of January 16, 2025) (cont.)

Iowa Fin Auth single fam mtg bnds (Social Bnds)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Social Bnds)		
<i>Long Term Rating</i>	AAA/A-1+/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Taxable)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single fam mtg bnds (Taxable) (Mortgage-backed Securities Program) ser 2022F dtd 05/03/2022 due 01/01/2031		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth single- fam mtg bnds		
<i>Long Term Rating</i>	AAA/A-1/Stable	Affirmed
Iowa Fin Auth sin fam mtg		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds ser 2016E due 07/01/2046		
<i>Long Term Rating</i>	AAA/A-1+/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds ser 2018C (non-AMT) due 07/01/2048		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds (non-amt)(social bnds)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds (non-AMT) ser 2018D due 07/01/2048		
<i>Long Term Rating</i>	AAA/A-1+/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds (taxable)		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds (Social Bnds) ser 2021A due 07/01/2047		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds ((social Bnds) (mtg Backed Securities Prog))		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds (taxable) (Social Bnds) ser 2022I due 01/01/2031		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth sin fam mtg bnds (Non- AMT) (Social Bnds) ser 2022G due 07/01/2034		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth Single Fam Mtg Bnds		
<i>Long Term Rating</i>	AAA/A-1/Stable	Affirmed
Iowa Fin Auth VRDB mtg rev bnds		
<i>Long Term Rating</i>	AAA/A-1+/Stable	Affirmed
Iowa Fin Auth SFMULTMBS		
<i>Long Term Rating</i>	AAA/Stable	Affirmed
Iowa Fin Auth SFMULTMBS		
<i>Long Term Rating</i>	AAA/Stable	Affirmed

Ratings Detail (As Of January 16, 2025) (cont.)

Iowa Fin Auth SFMULTMBS

*Long Term Rating*

AAA/Stable

Affirmed

Copyright © 2025 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.spglobal.com/ratings](http://www.spglobal.com/ratings) (free of charge), and [www.ratingsdirect.com](http://www.ratingsdirect.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.spglobal.com/usratingsfees](http://www.spglobal.com/usratingsfees).

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