

State of Washington

New Issue Summary

Sale Date: On or about July 19, 2022, competitively

Series: \$707,500,000 Various Purpose General Obligation Bonds, Series 2023A; and \$140,130,000 General Obligation Bonds (Taxable), Series 2023T. Par amounts are subject to change.

Purpose: Bond proceeds will be used primarily to pay and reimburse state capex.

Security: The state has irrevocably pledged its full faith, credit and taxing power to the GO bonds.

Washington's 'AA+' Issuer Default Rating (IDR) and GO bond rating reflect the state's broad and steadily growing economy, with solid long-term revenue growth prospects, a demonstrated commitment to fiscal balance and combined long-term liabilities that place a low burden on resources. The ratings also reflect the state's very strong financial resilience, which is supported by a statutory requirement for a balanced multiyear budget and formulaic funding of the budget stabilization account (BSA) leading to solid reserves. Education poses a unique spending pressure for the state, given both steady population growth and its role as the primary funder for K-12 schools statewide.

Economic Resource Base: Washington's fundamental economic profile remains strong, with steady growth, particularly in information-technology, and a diverse employment base. Income levels are above the national average, and high educational attainment also supports continued economic gains.

Key Rating Drivers

Revenue Framework: 'aaa': Revenue performance over time has generally been above long-term inflation, and Fitch Ratings expects this to continue to support solid growth prospects. The state has complete independent control over taxation, with an unlimited legal ability to raise operating revenues as needed.

Expenditure Framework: 'aa': Washington benefits from solid expenditure flexibility, although its flexibility is somewhat more restricted than for most states due to court mandates, statutory commitments and broad responsibility for education funding. Rapid population growth also exerts pressure on infrastructure spending. The state has a low burden of carrying costs and benefits from the broad expense-cutting authority common to most U.S. states.

Long-Term Liability Burden: 'aaa': The combined burden of debt plus pensions is low as a percentage of personal income but above the median for U.S. states. Elevated debt ratios incorporate the funding of substantial capital needs, particularly for transportation, but are offset by a moderate net pension liability and an expanding economic resource base.

Operating Performance: 'aa': Washington maintains very strong gap-closing capacity in the form of its superior budget flexibility and solid reserves. The state has prudently built up reserves in times of economic recovery and expansion, despite spending pressure for education and other pressing needs.

Rating Sensitivities

Factors that could, individually or collectively, lead to a positive rating action/upgrade:

- Strong economic and revenue growth that outpaces national GDP over time.
- Demonstration of the highest level of operating performance through the current economic recovery by managing higher spending for education and overall growth pressures, while establishing superior gap-closing capacity, such as through building reserves toward the recent peak of 20% of spending.



Ratings

Long-Term Issuer Default Rating AA+

New Issues

\$707,500,000 Various Purpose General Obligation Bonds, Series 2023A AA+

\$140,130,000 General Obligation Bonds (Taxable), Series 2023T AA+

Outstanding Debt

School Bond Guarantee Program AA+

General Obligation Bonds AA+

General Obligation Motor Vehicle Fuel Tax Bonds AA+

General Obligation Motor Vehicle Fuel Tax and Vehicle-Related Fees Bonds AA+

Rating Outlook

Stable

Applicable Criteria

U.S. Public Finance Tax-Supported Rating Criteria (May 2021)

Related Research

Fitch Rates State of Washington's \$848MM GOs 'AA+'; Outlook Stable (July 2022)

Analysts

Eric Kim
 +1 212 908-0241
eric.kim@fitchratings.com

Bryan Quevedo
 +1 415 732-7576
bryan.quevedo@fitchratings.com

Factors that could, individually or collectively, lead to a negative rating action/downgrade:

- A sustained increase in the long-term liability burden to 10% or more of personal income.
- An unanticipated shift in fiscal management that materially weakens fiscal resilience, such as sizable and continuing draws on reserves to support operations, particularly during times of economic expansion.

Current Developments

Economic Recovery Picks Up Pace

Washington's recovery from the pandemic has been in line with national trends. As of May 2022, the state had recovered 94% of jobs lost in the first months of the pandemic, consistent with the 96% national recovery through that same month. Washington had lagged national trends, but the pace of jobs growth accelerated in the second half of 2021 and into 2022. Headline unemployment of 3.9% in May was slightly above the national 3.6% rate that month, consistent with the pattern heading into the pandemic.

Washington's labor force growth has been ahead of national trends, reflecting the state's ongoing economic expansion. The state's employment to population ratio (EPOP; a measure of labor force utilization) as of May 2022 was 62.7%, near full recovery to the February 2020 level of 62.9%. Nationally, EPOP of 60.1% lags the February 2020 level of 61.2%. Washington's moderately faster recovery suggests the state's labor markets have recovered somewhat more quickly than the rest of the country.

Washington Fiscal Update

Improving economic conditions and conservative initial forecasts have supported increases in the state's official revenue forecasts with five upward revisions over the past year. The most recent update from the state's Economic and Revenue Forecast Council (ERFC) in June projected fiscal 2022 and 2023 revenues at \$1.3 billion, more than the February forecast and more than \$6 billion ahead of the enacted budget for the 2021–2023 biennium.

Notably, the most recent upward revision to forecast revenues comes despite the council also adopting slightly lower, but still positive, forecasts for key state economic metrics including personal income, state GDP and employment. According to the state's economist, the unexpected and persistently high inflation is a key driver, as the state's primary tax, the sales and use tax, is not inflation adjusted; as prices have risen, so have tax collections.

Following the February upward forecast revision, the state enacted a supplemental 2022 budget bill in March that added approximately \$5 billion in near general fund (NGF) appropriations for the current biennium. NGF is the designation for the state's primary operating funds. The additional appropriations were a mix of one-time allocations, such as the \$2 billion transfer to the state's transportation fund and most of the \$1.1 billion of allocated ARPA aid and recurring spending, such as the \$232 million for wage and compensation increases for state employees. The additional revenues forecast in the June revision and additional ERFC forecast adjustments over the next several months will be incorporated into the state Legislature's 2023 session.

The state's budgetary reserves have shifted considerably through the pandemic and are now on a path toward restoring pre-pandemic levels. Reduced balances in the constitutional BSA were followed by a sharp increase in ending balance and now a projected decline as surplus revenues are appropriated, as noted above regarding the supplemental 2022 budget bill. The Legislature also established a new reserve fund, the Washington Rescue Plan Transition Account (WRPTA), and allocated \$1 billion toward it in fiscal 2022 in the enacted biennial budget. The supplemental 2022 budget bill adds another \$1.1 billion next fiscal year. The WRPTA has statutory restrictions, but they are relatively broad, and the fund provides an important source of future fiscal flexibility for Washington. Fitch anticipates future legislative sessions could provide further clarity on policymakers' long-term intentions regarding the WRPTA and its viability as a source of sustained fiscal resilience for the state.

In the current Four-Year Budget Outlook (a statutorily-required budget forecast that reflects the supplemental 2022 budget bill, but not the June 2022 revenue forecast update), the state anticipates another \$500 million WRPTA deposit in fiscal 2025. By the end of the 2023–2025 biennium, the

Rating History (IDR)

Rating	Action	Outlook/	
		Watch	Date
AA+	Affirmed	Stable	4/15/22
AA+	Affirmed	Stable	7/19/13
AA+	Affirmed	Negative	1/27/12
AA+	Revised	Stable	4/5/10
AA	Affirmed	Stable	12/31/08
AA	Affirmed	Positive	9/4/07
AA	Affirmed	Stable	4/13/06
AA	Downgraded	-	1/11/02
AA+	Upgraded	-	11/25/97
AA	Assigned	-	8/18/92

budget outlook forecasts combined reserves (ending balance plus BSA plus WRPTA) of \$4.2 billion, or nearly 13% of projected revenues and other resources. This compares to \$6.5 billion at the end of fiscal 2022 before full effect of the supplemental budget bill and the additional \$1.3 billion in revenues forecast in June, and a pre-pandemic peak of \$3.6 billion at the end of fiscal 2019.

Credit Profile

Boeing remains a large employer in Washington and an important contributor to its economy; however, the state's overall manufacturing sector is about the same proportion of GDP as the nation's manufacturing sector, while Washington's information technology sector generates over 2.5x the proportion of GDP versus the nation. Microsoft and Amazon combined employ almost two times more individuals than Boeing, and several software and information companies continue to expand in the state. The workforce is highly educated, income levels are comparatively high and the state poverty rate is below the national average.

Revenue Framework

Washington relies on broad consumption-based revenues to fund operations and does not levy an income tax. This revenue mix results in collections that quickly reflect consumer spending and construction trends. Overall, general fund revenues exhibit a moderate level of volatility.

Washington's revenue structure is based on a retail sales and use tax (about half of total general fund - state revenues) and, to a much lesser extent, the B&O tax (about one-fifth) and state property tax (approximately 15%). The property tax, unusual for a state, is statutorily dedicated to meeting the state's K-12 funding obligations. The importance of the real estate excise tax (5% of tax revenues in fiscal 2021) varies considerably depending on the point in the economic cycle. The state enacted a capital gains tax in 2021 that is forecast to generate about \$500 million annually by fiscal 2025, equal to less than 2% of general fund-state revenues that year. The tax is currently being challenged in court.

This revenue structure makes the state budget especially sensitive to trends in consumer spending. In addition, construction (labor and materials) is assessed under the broad sales tax and receipts are significant to sales tax revenue performance, exposing the revenue stream to housing market volatility. Fitch expects revenues to continue to reflect cyclical trends offset somewhat by the state's ongoing population growth and economic expansion.

Washington has complete independent legal ability to control taxes, a significant credit strength.

Climate Commitment Act Creates New Dedicated Revenue Stream

In 2023, the state will begin implementation of its Climate Commitment Act, including a carbon emissions cap and trade (or cap and invest) system with some emissions allowances auctioned by the state to generate revenues. The state anticipates the program will generate \$500 million annually, to be used for clean energy transition and assistance, clean transportation and climate resiliency projects.

Expenditure Framework

As in most states, education and health and human services are Washington's largest operating expenses. Education is the larger line item, with state funding for local school districts and the public university and college system accounting for more than half of state general fund expenditures. Human services programs represent another third.

Washington's spending growth, absent policy actions, will likely be marginally above its solid revenue growth, requiring regular budget management to ensure ongoing balance. Education, specifically K-12, poses a particular pressure point. Several courts have interpreted the constitutional obligation to require significant investment by the state. Washington provides essentially full basic operational funding for K-12 school operations. Since the 2011-2013 biennium, K-12 state funding has more than doubled. Local districts can levy their own taxes to supplement state aid.

The fiscal challenge of Medicaid is common to all U.S. states, and the nature of the program as well as federal government rules limit the states' options in managing the pace of spending growth. As with all federal initiatives, Medicaid remains subject to regulatory changes that could affect various aspects. However, federal action to revise Medicaid's fundamental programmatic and financial

structure does not appear to be a near-term priority of the current federal administration or congressional leadership.

Washington retains solid expenditure flexibility. While Medicaid costs are somewhat beyond the state's ability to materially change given federal requirements for the program, the state's carrying costs for long-term liabilities are low. Like most states, Washington's operating budget (outside of Medicaid) goes largely toward funding of services rather than direct service delivery, allowing the state to shift costs to lower levels of government in times of fiscal stress. This is true even for education spending, as the state appropriates moneys to local school districts rather than operating any schools itself.

Long-Term Liability Burden

On a combined basis, Washington's burden of direct debt and adjusted net pension liabilities, at 5.8% of personal income, is above the 4.7% median for U.S. states (both per Fitch's November 2021 "State Liability Burdens Shrink in Fiscal 2020" report) but still low overall. Debt levels are twice the U.S. state median, reflecting in part the demands of many years of strong population growth. However, pension liabilities are below the median. Using updated information from the state's fiscal 2021 annual comprehensive financial report, the burden is in line with the prior year at 5.5%. Fitch expects the combined burden to remain at similar levels going forward, despite large capital needs, given strong population and personal income growth.

Washington's outstanding debt equals about two-thirds of Fitch-adjusted long-term liabilities and is primarily GO bonds. Capital needs are substantial, particularly for transportation, and future borrowing is anticipated. The state has repeatedly demonstrated its ability and willingness to raise revenues in support of transportation capital investment, most recently through an electrification fee for electric vehicles and an increase to the service fee for vehicle title transactions and registration. Tolling is also utilized as part of the funding solution. In the 2022 session, the Legislature also adopted the Move Ahead Washington revenue package, which allocated \$16.9 billion over 16 years toward various transportation needs. The largest revenue sources are \$5.4 billion from Climate Commitment Act revenues noted earlier and \$3.7 billion allocated to the state via the November 2021 federal Infrastructure Investment and Jobs Act.

In fiscal 2021, Washington's aggregate fiduciary pension assets fully covered total pension liabilities on a reported basis, assuming a 7.5% investment return for most of the plans. This ratio falls to an estimated 84% using Fitch's standard 6% investment return assumption. The state has made changes to manage pension costs, including elimination of cost-of-living adjustments. Washington has deferred full contributions to the closed pension systems in times of economic strain. Other post-employment benefits (OPEB) are limited and funded on a pay-as-you-go basis.

Contingent liabilities include the school bond guarantee program, which provides a GO guarantee to outstanding school district debt. The state utilized the enhancement for the first time on June 1, 2021 to advance approximately \$3.2 million due to an internet connectivity issue with the county's bank delaying debt service transfers for school districts in Mason County. The county made the transfer within the same day, fully covering the state's advance.

Fitch continues to exclude the covered school district debt from our long-term liability calculation as we consider the recent advance a very short-term issue affecting only a minimal portion of the contingent liability and not indicative of any ongoing need for state advances.

Operating Performance

Timely and Meaningful Budgetary Action

Frequent reviews of economic and financial forecasts allow the state to respond effectively to changing conditions. During the Great Recession and the recent pandemic-driven downturn, the state demonstrated its willingness and ability to utilize broad budget flexibility in response. In fiscal 2009 through fiscal 2011, the state implemented a combination of ongoing and one-time actions, and fully depleted accumulated reserves. In 2020, the state implemented spending cuts and planned reserve draws, although the ultimate draws on reserves were much less than planned at the outset of the pandemic. Fitch expects the state to similarly make use of its very strong gap-closing capacity, supported by its solid, reinstated reserve position, during future cyclical downturns.

Expanding Reserves Provide Important Cushion Given Spending Pressures

Budgeting can be challenging, in part due to the spending pressures noted earlier for education and growth needs, and a statutory mandate that the budget show projected balance over the four-year budget outlook period, rather than just the current biennium. Positively, the state took advantage of growth leading into the pandemic to rebuild financial flexibility, primarily by adding steadily to reserves.

The state has solid funding provisions for its BSA, which supports support building of financial flexibility. This constitutional account receives the first 1% of revenues collected every year, until it reaches its cap of 10% of annual general revenues. Furthermore, 75% of extraordinary growth in state revenue (defined as growth in general state revenues that exceed by one-third the average biennial growth of the prior five biennia) must be transferred to the BSA on top of the 1%. This measure also serves to limit the effect of revenue volatility on the operating budget. The new WRPTA provides an additional source of fiscal reserves, with less restrictions on accessing it than the BSA. Given its flexibility, Fitch currently considers WRPTA a component of the state's budgetary reserves.

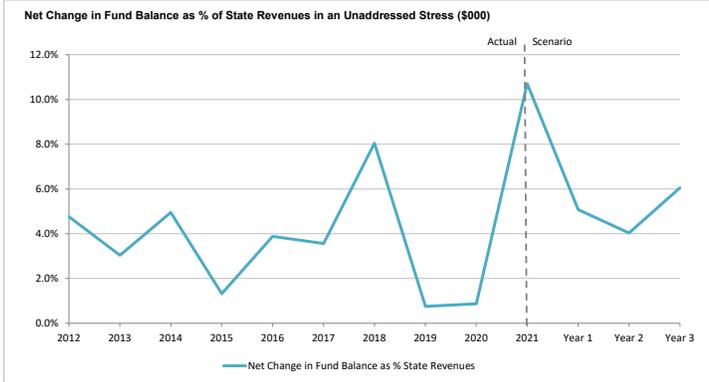
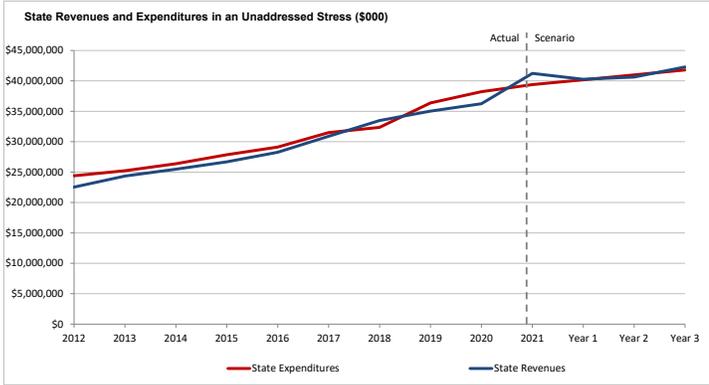
Washington's initiative and referendum environment creates a level of operating and financial uncertainty. However, it is significant that any law approved by voters in this manner can be amended or repealed by the Legislature by a two-thirds vote in the first two years after approval and by a simple majority thereafter. The Legislature repeatedly has shown the ability and willingness to suspend initiatives. The state constitution may not be amended by initiative or referendum.

ESG Considerations

Unless otherwise disclosed in this section, the highest level of ESG credit relevance is a score of '3'. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg.

Washington, State of (WA)

Scenario Analysis
Ver 36



Analyst Interpretation of Scenario Results

Frequent reviews of economic and financial forecasts allow the state to respond effectively to changing conditions. During the Great Recession and the recent pandemic-driven downturn, the state demonstrated its willingness and ability to utilize broad budget flexibility in response. In fiscal 2009 through fiscal 2011, the state implemented a combination of ongoing and one-time actions, and fully depleted accumulated reserves. In 2020, the state implemented spending cuts and planned reserve draws, though the ultimate draws on reserves were much less than planned at the outset of the pandemic. Fitch expects the state to similarly make use of its very strong gap-closing capacity, supported by its solid, reinstated reserve position, during future cyclical downturns.

Scenario Parameters:	Year 1	Year 2	Year 3
GDP Assumption (% Change)	(1.0%)	0.5%	2.0%
Expenditure Assumption (% Change)	2.0%	2.0%	2.0%
Revenue Output (% Change)	(2.3%)	0.9%	4.1%

Minimum Y1 Stress: -1% Case Used: **Moderate**

Revenues, Expenditures, and Net Change in Fund Balance	Actuals										Scenario Output		
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Year 1	Year 2	Year 3
Expenditures													
Total Expenditures	36,290,000	37,111,000	39,553,000	42,571,000	44,146,954	46,876,157	47,989,794	52,338,056	55,661,482	63,132,310	64,394,956	65,682,855	66,996,512
% Change in Total Expenditures	(1.1%)	2.3%	6.6%	7.6%	3.7%	6.2%	2.4%	9.1%	6.3%	13.4%	2.0%	2.0%	2.0%
State Expenditures	24,385,000	25,222,000	26,385,000	27,859,000	29,113,421	31,506,179	32,343,483	36,374,765	38,221,995	39,392,543	40,180,394	40,984,002	41,803,682
% Change in State Expenditures	1.2%	3.4%	4.6%	5.6%	4.5%	8.2%	2.7%	12.5%	5.1%	3.1%	2.0%	2.0%	2.0%
Revenues													
Total Revenues	34,430,000	36,250,000	38,649,000	41,399,000	43,294,691	46,269,050	49,114,776	50,993,434	53,683,175	64,976,549	64,488,962	65,323,455	67,472,020
% Change in Total Revenues	(1.5%)	5.3%	6.6%	7.1%	4.6%	6.9%	6.2%	3.8%	5.3%	21.0%	(0.8%)	1.3%	3.3%
Federal Revenues	11,905,000	11,889,000	13,168,000	14,712,000	15,033,533	15,369,978	15,646,311	15,963,291	17,439,487	23,739,767	24,214,562	24,698,854	25,192,831
% Change in Federal Revenues	(5.5%)	(0.1%)	10.8%	11.7%	2.2%	2.2%	1.8%	2.0%	9.2%	36.1%	2.0%	2.0%	2.0%
State Revenues	22,525,000	24,361,000	25,481,000	26,687,000	28,261,158	30,899,072	33,468,465	35,030,143	36,243,688	41,236,782	40,274,400	40,624,601	42,279,189
% Change in State Revenues	0.8%	8.2%	4.6%	4.7%	5.9%	9.3%	8.3%	4.7%	3.5%	13.8%	(2.3%)	0.9%	4.1%
Excess of Revenues Over Expenditures	(1,860,000)	(861,000)	(904,000)	(1,172,000)	(852,263)	(607,107)	1,124,982	(1,344,622)	(1,978,307)	1,844,239	94,006	(359,401)	475,508
Total Other Financing Sources	2,932,000	1,601,000	2,165,000	1,524,000	1,948,380	1,707,652	1,567,704	1,608,643	2,293,902	2,572,586	1,950,097	1,998,586	2,084,763
Net Change in Fund Balance	1,072,000	740,000	1,261,000	352,000	1,096,117	1,100,545	2,692,686	264,021	315,595	4,416,825	2,044,103	1,639,186	2,560,271
% Total Expenditures	3.0%	2.0%	3.2%	0.8%	2.5%	2.3%	5.6%	0.5%	0.6%	7.0%	3.2%	2.5%	3.8%
% State Expenditures	4.4%	2.9%	4.8%	1.3%	3.8%	3.5%	8.3%	0.7%	0.8%	11.2%	5.1%	4.0%	6.1%
% Total Revenues	3.1%	2.0%	3.3%	0.9%	2.5%	2.4%	5.5%	0.5%	0.6%	6.8%	3.2%	2.5%	3.8%
% State Revenues	4.8%	3.0%	4.9%	1.3%	3.9%	3.6%	8.0%	0.8%	0.9%	10.7%	5.1%	4.0%	6.1%

Notes: Scenario analysis represents an unaddressed stress on issuer finances. Fitch's scenario analysis assumes the GDP and expenditure growth sequence shown in the 'Scenario Parameters' section. For further details, please see Fitch's US Tax-Supported Rating Criteria.

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by following this link: <https://www.fitchratings.com/understandingcreditratings>. In addition, the following <https://www.fitchratings.com/rating-definitions-document> details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at <https://www.fitchratings.com/site/regulatory>. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its issuer, the requirements and practices in the jurisdiction in which the rated security is offered and sold and/or the issuer is located, the availability and nature of relevant public information, access to the management of the issuer and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification sources with respect to the particular security or in the particular jurisdiction of the issuer, and a variety of other factors. Users of Fitch's ratings and reports should understand that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information Fitch relies on in connection with a rating or a report will be accurate and complete. Ultimately, the issuer and its advisers are responsible for the accuracy of the information they provide to Fitch and to the market in offering documents and other reports. In issuing its ratings and its reports, Fitch must rely on the work of experts, including independent auditors with respect to financial statements and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions about future events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were not anticipated at the time a rating or forecast was issued or affirmed.

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individual, or group of individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$750,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular issuer, or insured or guaranteed by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$10,000 to US\$1,500,000 (or the applicable currency equivalent). The assignment, publication, or dissemination of a rating by Fitch shall not constitute a consent by Fitch to use its name as an expert in connection with any registration statement filed under the United States securities laws, the Financial Services and Markets Act of 2000 of the United Kingdom, or the securities laws of any particular jurisdiction. Due to the relative efficiency of electronic publishing and distribution, Fitch research may be available to electronic subscribers up to three days earlier than to print subscribers.

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see <https://www.fitchratings.com/site/regulatory>), other credit rating subsidiaries are not listed on Form NRSRO (the "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2022 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Fax: (212) 480-4435. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.