### FitchRatings

#### RATING ACTION COMMENTARY

# Fitch Rates Massachusetts' \$350MM GO Bonds 'AA+'; Outlook Stable

Fri 17 Sep, 2021 - 3:23 PM ET

Fitch Ratings - New York - 17 Sep 2021: Fitch Ratings has assigned a 'AA+' rating to approximately \$350 million in Commonwealth of Massachusetts GO bonds, consolidated loan of 2021, series D.

The par amount is subject to change pending final sale. The bonds are expected to be offered by competitive sale during the week of Sept. 20.

The series D bonds are being offered simultaneously with \$385 million in GO bonds, consolidated loan of 2021, series C, and approximately \$215 million in GO refunding bonds, 2021 series A, which were rated by Fitch on Sept. 10.

The Rating Outlook is Stable.

#### **SECURITY**

The GO bonds are general obligations of the commonwealth, to which its full faith and credit are pledged. A statutory state tax revenue growth limit does not exclude principal and interest on debt obligations from the limit.

#### **ANALYTICAL CONCLUSION**

The commonwealth's 'AA+' Issuer Default Rating (IDR) reflects its considerable economic resources, adroit management of economic and revenue cyclicality and strong budget controls. A strong reserve funding mechanism that shields the general fund from capital gains-related volatility has accelerated rebuilding of the stabilization fund, Massachusetts' budget reserve. The commonwealth carries a long-term liability burden for debt and net pension liabilities, adjusted to Fitch's standard 6% investment return assumption, which is well above the U.S. state median, but remains a moderate burden on resources.

#### **Economic Resource Base**

The commonwealth has a broad and wealthy economy. Education levels are high, and although population growth is below the U.S. average, it continues to lead the northeast region. Strength in the health care, technology and education sectors have supported GDP growth comparable to the nation's over time, and leave it well-positioned for solid future gains. Measured by per capita personal income, Massachusetts is the second-wealthiest state in the nation.

#### **KEY RATING DRIVERS**

Revenue Framework: 'aaa'

Tax revenues, while diverse, are dominated by individual income taxes, which are sensitive to economic conditions, particularly the components related to capital gains. Baseline growth prospects for taxes are strong, driven by the commonwealth's underlying economic fundamentals.

#### **Expenditure Framework: 'aaa'**

Consistent with most states, the natural pace of spending growth is likely to marginally exceed expected revenue growth over time, requiring ongoing cost control. The commonwealth has ample ability to reduce spending through the economic cycle.

#### Long-Term Liability Burden: 'aa'

Liability levels in Massachusetts, while comparatively high for a U.S. state, are a moderate burden on resources. The commonwealth's above-average liability position is partly the result of state funding of both capital needs and pensions that are more commonly funded at the local level, primarily for K-12 education.

#### **Operating Performance: 'aaa'**

The commonwealth has superior gap-closing capacity supported by a responsive fiscal management framework, including a requirement to cut spending in response to revenue gaps and strong reserve funding practices. Conservative budgeting, ongoing economic and revenue monitoring, and a mechanism to redirect a portion of economically sensitive capital gains tax receipts into the stabilization fund, the commonwealth's budget reserve, enhance fiscal flexibility.

#### **RATING SENSITIVITIES**

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

--A sustained reduction in the long-term liability burden accompanied by a reduction in carrying costs.

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

- -- Economic growth trends shifting lower, signaling less robust revenue growth prospects and weakening financial resilience.
- --Evidence of difficulty in absorbing rising needs for schools, Medicaid and long-term liabilities, while maintaining strong operating performance.
- --An increase in long-term liabilities that results in an elevated burden likely to consistently exceed 20% of personal income.

#### **BEST/WORST CASE RATING SCENARIO**

International scale credit ratings of Sovereigns, Public Finance and Infrastructure issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of three notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit https://www.fitchratings.com/site/re/10111579.

#### **CURRENT DEVELOPMENTS**

Federal Relief Provides Critical Support

Federal aid since the start of the pandemic has boosted overall economic activity and provided substantial fiscal support in Massachusetts and throughout the country. Direct fiscal aid has included a 6.2 percentage point increase in the Federal Medical Assistance Percentage (FMAP) for Medicaid, a provision expected to remain in place through the end of calendar 2021. Over this period, Massachusetts anticipates the provision will generate more than \$1.7 billion in programmatic revenue for MassHealth, the commonwealth's main Medicaid program, as well as additional amounts in non-programmatic revenue and health and human services departmental revenue, outside of MassHealth.

The state also received \$2.5 billion from the Coronavirus Relief Fund (CRF) provisions included in the Coronavirus Aid, Relief and Economic Security (CARES) Act early last year, and separate provisions supporting schools and transit further reduced potential fiscal demands on the state. The state allocated its CRF funds for a range of pandemic response costs including medical equipment, hospital needs and targeted social services.

Under the \$1.9 trillion American Rescue Plan Act of 2021 (ARPA), Massachusetts has only recently begun allocating the \$5.3 billion in direct federal aid received in the spring; this figure excludes \$3.4 billion for local governments and over \$1 billion for transit. To date, the governor has allocated \$194 million to four localities severely affected by the pandemic, among other purposes. Negotiations continue on the governor's proposal to direct another \$2.9 billion to various needs, including to support climate resilience. Until spent, these funds are augmenting general fund cash balances.

#### Massachusetts Economic Update

Economic implications of the pandemic have been significant, but the state's recovery is well underway. Early in the pandemic, Massachusetts suffered a more severe job market shock than the nation as a whole, with non-farm payrolls falling 19% from February to April 2020, more severe than the national decline (15%). From April 2020 through July 2021, 67% of lost jobs in Massachusetts have been regained, behind the 73% median for states, and the official monthly unemployment rate of 4.9% in July 2021 has converged with the 4.9% median rate for states. When the unemployment rate is adjusted to include labor force exits, the Fitch-adjusted rate for Massachusetts, at 6%, is below the 6.5% median for states.

#### Massachusetts Budgetary Update

To date, Massachusetts has navigated the economic and fiscal disruptions of the pandemic without materially affecting its strong operating performance and remains well-positioned

to continue doing so. Through the pandemic, the state's position has been bolstered by a solidly funded stabilization fund, the commonwealth's budget reserve, and by available federal pandemic aid.

Given pandemic-related uncertainty, Massachusetts delayed enactment of a fiscal 2021 budget, instead passing successive interim budgets early in the fiscal year. The governor ultimately signed a full fiscal 2021 budget in December. Revenue collections progressively improved through the fiscal year, boosted by strong individual income taxes and the effects of federal stimulus.

The consensus forecast as of October 2020, upon which the budget was based, anticipated tax revenues of \$27.6 billion (excluding tax-related settlements); this figure was revised upward to \$29.1 billion as of the January 2021 consensus. Preliminary collections are now expected to measure \$34.1 billion, 17.3% above the benchmark, driven largely by individual income tax receipts.

The transfer of capital gains revenue above the statutory threshold to the stabilization fund is expected to bring its balance to about \$4.6 billion (8.9% of total revenue); this is up from \$3.5 billion (7.4% of total revenue) in the prior year. Including the stabilization fund, the total ending fund balance is expected to reach nearly \$6 billion. The governor has proposed that \$1 billion of the surplus be used for unemployment insurance (UI) trust fund to provide relief to employers.

Revenue strength is expected to continue into fiscal 2022, with tax collections of almost \$34.5 billion (including tax-related settlements), well above the \$30.1 billion figure as of the January 2021 consensus. Relatively few tax law changes were included in the plan; a separate proposal by the governor for a two-month sales tax holiday, in August and September, was not taken up by the legislature.

Spending in the enacted fiscal 2022 budget (before any potential veto overrides) stands at \$47.6 billion, 3.6% over fiscal 2021 spending level. The budget fully funds the phase-in of the Student Opportunity Act (SOA) school funding expansion authorized in 2019 but delayed by the pandemic; school aid stands at \$5.5 billion, \$220 million higher than the prior year. It also sets aside \$350 million for future SOA needs and contributes \$250 million to pensions beyond the current statutory contribution.

The enacted budget forecasts a \$1.2 billion deposit to the stabilization fund, instead of the \$1.5 billion draw proposed in the executive budget. The additional deposit would bring the balance to \$5.8 billion (10.9% of total revenue).

#### **Revenue Framework**

General fund resources derive primarily from individual income, sales and corporate income taxes. The first two are particularly important, with an estimated 57% of tax revenues from individual income taxes and another 23% from sales taxes in fiscal 2021. The individual income tax is levied at flat rates based on type of income. A 5% rate has been applicable to most income categories since Jan. 1, 2020 under a statute that had gradually reduced the rate from 5.3% beginning Jan. 1, 2012. The statute also reinstated the state charitable deduction as of Jan. 1, 2021, although both the fiscal 2021 and fiscal 2022 budgets have delayed the provision.

Revenues are economically sensitive, particularly individual income tax receipts from capital gains. Consistent with the experience of many other states, individual income tax collection trends have also been affected in recent years by tax law changes, most recently those associated with the December 2017 federal Tax Cuts and Jobs Act (TCJA).

Solid economic fundamentals and a diverse revenue system are the basis for a revenue profile that is likely to approximate national economic growth over time, in Fitch's view.

The commonwealth has no significant legal limitations on its ability to raise revenues. A statutory tax revenue growth limit based on average wage and salary growth has not hindered the commonwealth's ability to manage its revenue resources. The initiative environment also has periodically been active, and certain revenues have been affected by past initiative petitions, notably property taxes. Importantly, the legislature retains the ability to make changes to statutes passed by successful initiative petitions.

#### **Expenditure Framework**

Massachusetts' expenditure profile is very broad, driven by an expansive scope of services. Medicaid and other social services are the largest single spending commitment at just over half of general fund spending. Education is also a significant commitment, with extensive commonwealth funding of local schools and a broad higher education network. Funding formula changes for local schools under 2019's SOA are intended to address needs in districts with higher concentrations of poverty.

The SOA was expected to result in a seven-year, \$1.5 billion ramp-up of formula funding beginning in fiscal 2021, although the pandemic delayed initial increases. The commonwealth's education commitment extends to covering local teacher pension liabilities, although not the liability associated with their other post-employment benefits

(OPEB). Consistent with practices in many smaller states, the commonwealth is responsible for delivering or funding many services routinely funded at local levels elsewhere.

As with most states, spending in the absence of policy actions is expected to be in line with to marginally above expected revenue growth, primarily driven by social services, particularly Medicaid. 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. 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. As with all federal initiatives, Medicaid remains subject to regulatory changes that could affect various aspects of the program.

The commonwealth retains ample ability to cut spending; statute allows for swift response in the event of forecast revenue underperformance, including the governor's statutory powers to unilaterally cut allotments under Section 9C of commonwealth General Law, Chapter 29.

Carrying costs for long-term liabilities, including debt service, actuarially determined pension contributions and OPEB pay-go appropriations, are elevated relative to most states, at 11.2% of governmental expenditures in fiscal 2020. Under state finance law, revenues available for budgeting are net of statutory pension contributions and transfers for the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts School Building Authority (MSBA).

Pension changes were undertaken in 2011, and the state maintains a relatively conservative statutorily closed amortization target for achieving full funding in 2040. Pension contributions have risen in part due to experience updates and shifts to more conservative actuarial assumptions. Based on a funding schedule that it updates every three years, most recently in 2020, the commonwealth forecasts contributions rising about 9.6% per year until the projected date of full prefunding, in fiscal 2036. Fitch views this trajectory of contribution increases as high, but manageable within the commonwealth's fiscal framework.

#### **Long-Term Liability Burden**

Debt and Fitch-adjusted net pension liabilities are comparatively high for a state but represent a moderate burden on resources. On a combined basis, the burden of direct debt and the adjusted net pension liabilities for employees and teachers equaled 18.8% of

personal income, well above the 5% median for U.S. states, as of Fitch's 2020 state liability report, which used 2019 data.

As of July 31, 2021, Fitch estimates the commonwealth's direct debt at a comparatively high 7.8% of personal income, including sales tax-backed obligations of the MBTA and the MSBA and annual contract assistance commitments that support the Massachusetts Department of Transportation (MassDOT). This figure also includes the new money component of the current GO sale. GO bonds represent the majority of outstanding debt. The commonwealth's above-average role in funding local government capital needs, relative to most other states, partially drives the debt burden.

Fitch expects direct debt to remain comparatively high for a U.S. state. Earlier this year, the governor signed a \$16 billion transportation bond authorization to be directed to highways, transit, bridges and other state and local transportation needs. Separately, the governor also authorized borrowing to reduce the state's federal UI trust fund loan balance. Any bonds would be repaid by an assessment on employers.

As of their June 30, 2020 financial reports, pension systems covering state employees and teachers (except in the City of Boston) held fiduciary assets covering 62.5% and 50.7% of their total pension liabilities, respectively, based on the 7.15% discount rates implemented as of their 2020 accounting valuations; the rates have been lowered three times from the 7.5% used for the 2017 valuation. Using Fitch's standard 6% return assumption would lower the 2020 ratios to 54.9% and 44.5%, respectively.

The commonwealth carries a net OPEB liability for state employees, but not local teachers, measuring \$20.7 billion, based on a 3.6% discount rate and net of prefunding built in recent years from tobacco settlement monies, excess capital gains collections and other sources. The net OPEB liability measures 3.8% of personal income.

#### **Operating Performance**

Fitch believes the commonwealth retains superior capacity to address cyclical downturns and has repeatedly demonstrated its commitment to maintaining a solid financial position. Mechanisms for maintaining balance include the governor's requirement to reduce allotments or identify alternative balancing measures in the event of a mid-year forecast deficiency, under Section 9C of commonwealth General Law, Chapter 29, noted above.

Additionally, since 2011 the commonwealth has operated under a mechanism to reduce the effect of volatile capital gains-related tax revenues on its budget. Capital gains-related receipts that can be included in the budget are capped annually at a level that rises by U.S.

GDP, with excesses dedicated to the stabilization fund (90%) and retiree benefit obligations (10%). The threshold was \$1.26 billion in fiscal 2020, although a planned transfer to the stabilization fund was retained in the general fund given pandemic-related stress. For fiscal 2021, the threshold was \$1.312 billion, which triggered a transfer of nearly \$1.1 billion to the stabilization fund. For fiscal 2022, the threshold is \$1.352 billion. A similar mechanism covers one-time judgments and settlement payments.

Budgetary management during periods of economic recovery consistently supports the rebuilding of financial flexibility. Conservative revenue assumptions and the reserve funding mechanisms noted above enabled the commonwealth to eventually rebuild a sizable stabilization fund balance, and the commonwealth has limited its use of nonrecurring resources. Similar to many states, the commonwealth has faced budgetary challenges at several points in the economic expansion that ended with the pandemic, including from the effect of shifting federal tax law and from unexpected demands for Medicaid. Although these factors initially weighed on progress in rebuilding the stabilization fund balance to levels attained before the Great Recession, the budgetary mechanisms to shift cyclical windfalls to the stabilization fund raised its balance considerably in the period prior to the pandemic.

#### **DATE OF RELEVANT COMMITTEE**

09 September 2021

In addition to the sources of information identified in Fitch's applicable criteria specified below, this action was informed by information from Lumesis and Committee for a Responsible Federal Budget.

## REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING

The principal sources of information used in the analysis are described in the Applicable Criteria.

#### **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

#### **RATING ACTIONS**

ENTITY/DEBT	RATING	PRIOR
Massachusetts, Commonwealth of (MA) [General Government]		
<ul> <li>Massachusetts, Commonwealth of (MA) /General Obligation - Unlimited Tax/1 LT</li> </ul>	LT AA+ Rating Outlook Stable Affirmed	AA+ Rating Outlook Stable

#### **VIEW ADDITIONAL RATING DETAILS**

#### **FITCH RATINGS ANALYSTS**

#### **Douglas Offerman**

**Senior Director** 

**Primary Rating Analyst** 

+1 212 908 0889

douglas.offerman@fitchratings.com

Fitch Ratings, Inc.

Hearst Tower 300 W. 57th Street New York, NY 10019

#### **Bryan Quevedo**

Director

Secondary Rating Analyst

+1 415 732 7576

bryan.quevedo@fitchratings.com

#### **Eric Kim**

Senior Director

Committee Chairperson

+12129080241

eric.kim@fitchratings.com

#### **MEDIA CONTACTS**

#### Sandro Scenga

New York +1 212 908 0278

sandro.scenga@thefitchgroup.com

Additional information is available on www.fitchratings.com

#### **PARTICIPATION STATUS**

The rated entity (and/or its agents) or, in the case of structured finance, one or more of the transaction parties participated in the rating process except that the following issuer(s), if any, did not participate in the rating process, or provide additional information, beyond the issuer's available public disclosure.

#### **APPLICABLE CRITERIA**

U.S. Public Finance Tax-Supported Rating Criteria (pub. 04 May 2021) (including rating assumption sensitivity)

#### **APPLICABLE MODELS**

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).

FAST Econometric API - Fitch Analytical Stress Test Model, v3.0.0 (1)

#### **ADDITIONAL DISCLOSURES**

Solicitation Status

**Endorsement Policy** 

#### **ENDORSEMENT STATUS**

Massachusetts, Commonwealth Of (MA)

EU Endorsed, UK Endorsed

#### **DISCLAIMER**

ALL 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 SERVICE OR ANCILLARY SERVICE TO THE RATED ENTITY OR ITS RELATED THIRD PARTIES. DETAILS OF PERMISSIBLE SERVICE(S) FOR WHICH THE LEAD ANALYST IS BASED IN AN ESMA- OR FCA-REGISTERED FITCH RATINGS COMPANY (OR BRANCH OF SUCH A COMPANY) OR ANCILLARY SERVICE(S) CAN BE FOUND ON THE ENTITY SUMMARY PAGE FOR THIS ISSUER ON THE FITCH RATINGS WEBSITE.

#### **READ LESS**

#### **COPYRIGHT**

Copyright © 2021 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. 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 thirdparty 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 preexisting 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.

#### **READ LESS**

#### **SOLICITATION STATUS**

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

#### **ENDORSEMENT POLICY**

Fitch's international credit ratings produced outside the EU or the UK, as the case may be, are endorsed for use by regulated entities within the EU or the UK, respectively, for regulatory purposes, pursuant to the terms of the EU CRA Regulation or the UK Credit Rating Agencies (Amendment etc.) (EU Exit) Regulations 2019, as the case may be. Fitch's approach to endorsement in the EU and the UK can be found on Fitch's Regulatory Affairs page on Fitch's website. The endorsement status of international credit ratings is provided within the entity summary page for each rated entity and in the transaction detail pages for structured finance transactions on the Fitch website. These disclosures are updated on a daily basis.

US Public Finance North America United States